

32073



PROVINCE OF MANITOBA

DEPARTMENT OF HEALTH

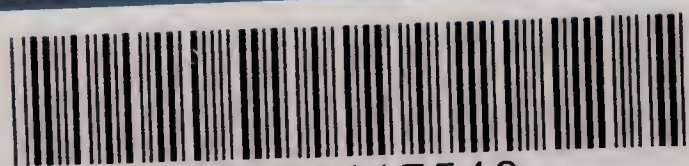
ANNUAL REPORT

FOR THE CALENDAR YEAR

1967

WINNIPEG MANITOBA

RBB/32 af



22501417543

PROVINCE OF MANITOBA

DEPARTMENT OF HEALTH

A N N U A L R E P O R T

FOR THE CALENDAR YEAR

1967

WINNIPEG, MANITOBA

MANITOBA DEPARTMENT OF HEALTH

DIRECTORY OF DEPARTMENTAL OFFICERS

Minister

Honourable C.H. Witney

Deputy Minister of Health

J.B. Morison, M.D., D.P.H.

ADMINISTRATION DIVISION

Director, R.D. Johnstone, B. Comm., C.A.

Vital Statistics and Records, Recorder, D.W. Matheson

MENTAL HEALTH DIVISION

Director, R.H. Taveñer, M.D.

Office of Child Development, Director, J.L. Asselstine, M.D.

Psychiatric Institute, Medical Superintendent, E. Johnson, M.D.

Hospital for Mental Diseases, Selkirk, Medical Superintendent, M.C. Kovacs, M.D.

Manitoba School for Retardates, Portage la Prairie,
Medical Superintendent, G.H. Lowther, M.B., Ch. B.

Farm Management, Manager, G.R. Chandler, B. Sc. A.

PUBLIC HEALTH DIVISION

Director, Peter Warner, M.R.C.S., L.R.C.P., M.B., B.S., M.D., Ph.D., F.C. Path.

Local Health Services, Director, J.C. Elias, M.D., D.P.H.

Environmental Sanitation, Director, L.A. Kay, M.A.Sc., P. Eng.

Public Health Engineering Director, L.A. Kay, M.A.Sc., P. Eng.

Food Control, Director, A.G. McLeod, B.Sc. A.

Industrial Hygiene, Public Health Chemist, W.M. Ward, B.A.(Chem.), M.P.H.

Public Health Inspection, Chief Public Health Inspector, M. Flattery

Health Education Services, Director, D.F. McLean, B.S.A.

Preventive Medical Services, Director, E. Snell, L.R.C.P., D.P.H.

Venereal Disease Control, Director, J.A. Eadie, M.B., Ch.B., D.P.H.

Care Services, Director, W. Watt, M.B., Ch.B., D.P.H.

Public Health Nursing, Director, Miss J. Williamson, R.N., D.P.H.

Dental Services, Director, Clifford H. McCormick, B.A., D.D.S., D.D.P.H.

Laboratory Services, Bacteriologist and Director, J.G. Fox, M.D.

Northern Health Services, Director, M.K. Pannikar, L.M.S.A., M.R.C.S., L.R.C.P.,
D.T.M.&H., D.P.H.

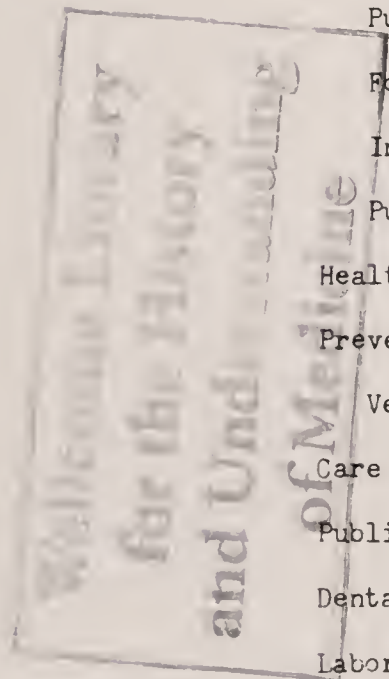
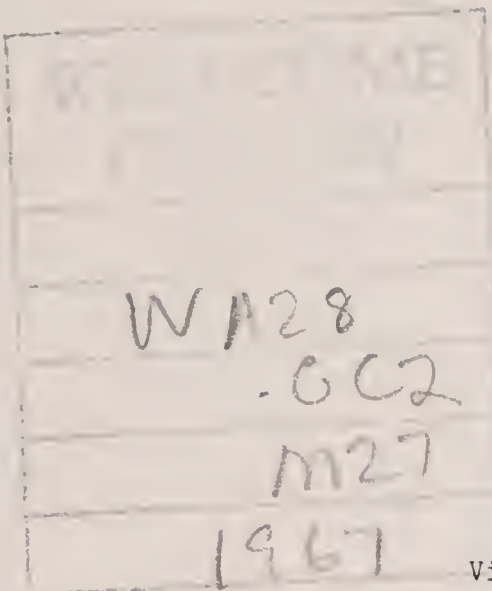
Emergency Health and Ambulance Services, Director, C.G. Chapman, B.Sc., (Pharm.)

REHABILITATION DIVISION

Director, W.N. Boyd, B.A., M.S.W.

MANITOBA MEDICAL SERVICES INSURANCE CORPORATION

Chairman. A.R. Tanner. M.D.



MANITOBA DEPARTMENT OF HEALTH

ANNUAL REPORT

CALENDAR YEAR - 1967

T A B L E O F C O N T E N T S

	Page
<u>Administration Division</u>	
Vital Statistics	2
<u>Mental Health Division</u>	
Psychiatric Services	15
Psychiatric Institute	22
Brandon Hospital for Mental Diseases	27
Selkirk Hospital for Mental Diseases	64
Manitoba School For Retardates	75
Child Guidance Clinic	80
Farms Management	84
<u>Public Health Division</u>	
Public Health Division Services	89
Local Health Services	91
Environmental Sanitation	111
Public Health Engineering	111
Food Control	115
Industrial Hygiene	120
Public Health Inspection	124
Provincial Sanitary Control Commission	130
Health Education Services	139
Preventive Medical Services	154
Care Services	212
Public Health Nursing Services	233
Dental Services	239
Public Health Laboratory Services	253
Northern Health Services	269
Emergency Health Services	274
<u>Rehabilitation Division</u>	
Rehabilitation Services	280

MINISTRE DE LA SANTE

ANNÉE 1967

1967 - 1968

TABLE DES MATIÈRES

1967

ANNÉE 1967

1967

1967

ANNÉE 1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

1967

ANNÉE 1967

1967

<https://archive.org/details/b31413626>

VITAL STATISTICS

The basic functions of the Vital Statistics Section are:-

- Primary: (1) to register and permanently preserve the records of births, stillbirths, deaths and marriages of the people of the Province of Manitoba;
- (2) to issue certificates of birth, death and marriage from the records;
- Secondary: (3) to tabulate, maintain and report the vital statistics data of the inhabitants of Manitoba. (No analyses done at present.);
- (4) the administration of The Vital Statistics Act and The Marriage Act.

The Province of Manitoba has had registration of births, deaths, and marriages since early in 1882 under Governmental authority. This Division also has in our archives various Church records of baptisms, burials and marriages for different religious denominations from 1812.

The Division receives weekly from the various 259 local and district registrars located throughout the Province, registrations of birth, stillbirth, death and marriage. These registrations are checked for accuracy, queried if necessary, individually numbered, coded and microfilmed, all under a system which is standard in all Canadian Provinces. We send a microfilm image of all original registrations to the Dominion Bureau of Statistics in Ottawa for their tabulation and statistical use.

VITAL STATISTICS

Table A

Births (excluding Stillbirths), Marriages
and Deaths - Manitoba, 1967
with Rates per 1,000 Population

	* <u>1967</u>		** <u>1966</u>		** <u>1965</u>	
	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>
<u>Live Births:</u>						
White	15,056	16.2	16,638	17.9	18,531	19.8
Indian	1,661	53.6	1,688	56.3	1,745	62.4
All	16,717	17.4	18,326	19.1	20,276	21.1
<u>Marriages:</u>						
White	7,416	7.9	7,158	7.7	6,885	7.4
Indian (on reserves)	121	5.8	154	5.1	127	4.5
All	7,537	7.8	7,312	7.6	7,012	7.5
<u>Deaths:</u>						
White	6,907	7.4	7,725	8.3	7,515	8.0
Indian	285	9.2	284	9.5	259	9.2
All	7,192	7.5	8,009	8.4	7,774	8.1

* - Preliminary Vital Statistics Figures

** - Final Vital Statistics Figures

White	932,000	June 1967 Estimated Population
Indian	31,000	Census with Estimate of Indian
All	<u>963,000</u>	Population based on January 1968.

Table B

Deaths in Manitoba by Age, Sex and Race

(The total of each group compared with 1966 and 1965)

	<u>White</u>		<u>Indian</u>		<u>All</u>	<u>All</u>	<u>All</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>1967</u>	<u>1966</u>	<u>1965</u>
Under 1 Year	161	115	46	38	360	391	474
1 - 4 Years	37	27	11	18	93	99	97
5 - 14 Years	40	25	9	5	79	90	82
15 - 24 Years	87	31	15	11	144	161	136
25 - 44 Years	212	112	26	11	361	417	423
45 - 64 Years	925	504	14	15	1,458	1,595	1,508
65 - 79 Years	1,568	959	25	16	2,568	2,811	2,897
80 Years and Over	1,096	1,007	11	14	2,128	2,444	2,157
Not Stated	1	-	-	-	1	1	-
Totals	4,127	2,780	157	128	7,192	8,009	7,774

Table C

Ten Leading Causes of Death

(With Rates per 100,000 Population)

	<u>Number</u>	<u>Rate</u>
1. Heart Disease	2,351	244.1
2. Cancer (Malignant Neoplasms)	1,402	145.6
3. Vascular lesions affecting central nervous system	767	79.6
4. Accidents	499	51.8
5. Pneumonias	412	42.8
6. Arteriosclerosis	153	15.9
7. Hypertensive Disease	102	10.6
8. Diabetes Mellitus	90	9.3
9. Suicide	90	9.3
10. Congenital Malformations	86	8.9

Table D

	<u>1967</u>	<u>1966</u>	<u>1965</u>
<u>Live Births:</u>			
White	14,825	16,391	18,238
Metis	231	247	293
Non-Treaty Indian	367	344	300
Treaty Indian	1,294	1,344	1,445
All	16,717	18,326	20,276
<u>Deaths:</u>			
White	6,847	7,666	7,459
Metis	60	59	56
Non-Treaty Indian	61	35	34
Treaty Indian	224	249	225
All	7,192	8,009	7,774
<u>Stillbirths:</u>			
White	199	211	271
Metis	8	6	4
Non-Treaty Indian	8	4	3
Treaty Indian	24	27	21
All	239	248	299

Note: Unable to determine rates on above table as
population figures for Metis not available.

Table E

Deaths of Children Under One Year of Age

By Cause and Age - Manitoba 1967

	Under 7 Days	7-28 Days	Over 28 Days to 1 Yr.	Under 1 Yr.
<u>White:</u>				
Lower Respiratory (480-483, 490-493, 500-502, 763)	11	1	17	29
Immaturity (774-776)	37	-	2	39
Congenital Malformations (750-759)	28	5	15	48
Birth Injuries (760-761)	30	2	-	32
Asphyxia & Atelectasis (762)	17	1	5	23
Gastro-Intestinal (543, 571-2, 764)	-	-	7	7
Ill-defined (773, 795)	42	1	2	45
Other	10	5	38	53
Totals	175	15	86	276
<u>Indian:</u>				
Lower Respiratory (480-483, 490-493, 500- 502, 763)	-	5	20	25
Immaturity (774-776)	12	1	-	13
Congenital Malformation (750-759)	6	-	3	9
Birth Injuries (760-761)	2	-	-	2
Asphyxia & Atelectasis (762)	3	1	-	4
Gastro-Intestinal (543, 571-2, 764)	-	-	8	8
Ill-defined (773, 795)	4	-	1	5
Other	1	-	17	18
Totals	28	7	49	84
White and Indian Totals	203	22	135	360

Table 5

Abbreviated List of Fifty Causes

Number of deaths and rates per 100,000 population-Manitoba 1967 White & Indian

Abbreviated List	Detailed List Nos.	Cause Groups	White Incl. Metis		Indian		Totals	
			Number	Rate	Number	Rate	Number	Rate
B 1	001-019	All Tuberculosis	(31)	(3.3)	(2)	(6.5)	(33)	(3.4)
B 2	001-008	Tuberculosis of respiratory system	27	2.9	-	-	27	2.8
B 3	010-019	Tuberculosis, other forms	4	0.4	2	6.5	6	0.6
B 4	020-029	Syphilis and its' sequelae	-	-	-	-	-	-
B 5	040	Typhoid Fever	-	-	-	-	-	-
B 6	043	Cholera	-	-	-	-	-	-
B 7	045-048	Dysentery, all forms	-	-	1	3.2	1	0.1
B 8	050, 051	Scarlet Fever & Streptococcal Sore Throat	-	-	-	-	-	-
B 9	055	Diphtheria	-	-	-	-	-	-
B 10	056	Whooping Cough	-	-	-	-	-	-
B 11	057	Meningococcal Infections	-	-	-	-	-	-
B 12	058	Plague	-	-	-	-	-	-
B 13	080	Acute Poliomyelitis	-	-	-	-	-	-
B 14	084	Smallpox	-	-	-	-	-	-
B 15	085	Measles	2	0.2	4	12.9	6	0.6
B 16	100-108	Typhus & other rickettsial diseases	-	-	-	-	-	-
B 17	110-117	Malaria	-	-	-	-	-	-
	030-039, 041, 042, 044-049, 052-054, 059-074, 081-083, 086-096, 120-138	All other diseases classified as infectious and parasitic	11	1.2	2	6.5	13	1.3
B 18	140-205	Malignant Neoplasms, including neoplasms of lymphatic & haematopoietic tissues Cancer, excluding Hodgkin's Disease, leukaemia and aleukaemia	1,387	14.8	15	48.4	1,402	14.6
	(202, 203, 205) (140-200)		(1,309)	(14.0.5)	(12)	(38.7)	(1,321)	(137.2)
	(201)	Hodgkin's Disease	(15)	(1.6)	-	-	(15)	(1.6)
	(204)	Leukaemia & Aleukaemia	(63)	(6.8)	(3)	(9.7)	(66)	(6.9)
B 19	210-239	Benign & unspecified neoplasms	16	1.7	-	-	16	1.7
B 20	260	Diabetes Mellitus	87	9.3	3	9.7	90	9.3
B 21	290-293	Anaemias	15	1.6	1	3.2	16	1.7
B 22	330-334	Vascular lesions affecting central nervous system	756	81.1	11	35.5	767	79.6
B 23	340	Non-meningococcal Meningitis	6	0.6	4	12.9	10	1.0
B 24	400-402	Rheumatic Fever	-	-	-	-	-	-
B 25	410-416	Chronic Rheumatic Heart Disease	58	6.2	3	9.7	61	6.3
B 26	420-422	Arteriosclerotic & degenerative heart disease	2,202	236.3	23	74.2	2,225	231.0
B 27	430-434	Other diseases of the heart	122	13.1	4	12.9	126	13.1
B 28	440-443	Hypertension with heart disease	64	6.9	1	3.2	65	6.7
B 29	444-447 (450)	Hypertension without mention of heart disease Arteriosclerosis	36 (150)	3.9 (16.1)	1 (3)	3.2 (9.7)	37 (153)	3.8 (15.9)

Table F continued

Abbreviated list of Fifty Causes

Number of deaths and rates per 100,000 population-Manitoba 1967 White & Indian

Abbreviated List	Detailed List Nos.	Cause Groups	White Incl. Metis		Indian		Totals	
			Number	Rate	Number	Rate	Number	Rate
B 30	480-483	Influenza	5	0.5	1	3.2	6	0.6
B 31	490-493	Pneumonia	357	38.3	39	125.8	396	41.1
B 32	500-502	Bronchitis	61	6.5	1	3.2	62	6.4
B 33	540-541	Ulcer of stomach & duodenum	38	4.1	2	6.5	40	4.2
B 34	550-553	Appendicitis	5	0.5	-	-	5	0.5
B 35	560,561,570	Intestinal obstruction and hernia	42	4.5	1	3.2	43	4.5
B 36	543,571,572	Gastritis, duodenitis, enteritis and colitis except diarrhoea of the newborn	26	2.8	9	29.0	35	3.6
B 37	581	Cirrhosis of liver	56	6.0	4	12.9	60	6.2
B 38	590-594	Nephritis & Nephrosis	35	3.8	5	16.1	40	4.2
B 39	610	Hyperplasia of prostate	14	1.5	-	-	14	1.5
B 40	640-652, 660, 670-689	Complications of pregnancy, childbirth & the puerperium	1	0.1	-	-	1	0.1
B 41	750-759	Congenital malformation	75	8.0	11	35.5	86	8.9
B 42	760-762	Birth injuries, postnatal asphyxia & atelectasis	57	6.1	6	19.4	63	6.5
B 43	763-768	Infections of the newborn	13	1.4	4	12.9	17	1.8
B 44	769-776	Other diseases peculiar to early infancy & immaturity, unqualified	87	9.3	21	67.7	108	11.2
B 45	780-795	Senility without mention of psychosis, ill-defined & unknown causes	31	3.3	9	29.0	40	4.2
B 46	Residual	All other diseases	686	73.6	23	74.2	709	73.6
"E" Code	Alternative Classification of Accidents, Poisoning & Violence (External Causes)							
BE 47	E810-835	Motor vehicle accidents	175	18.8	15	48.4	190	19.7
BE 48	E800-E802, E840-E962	All other accidents	259	27.8	50	161.3	309	32.1
BE 49	E963, E970-F979	Suicide & self-inflicted injury	84	9.0	5	19.4	90	9.3
BE 50	F964-E965, E980-F999	Homicide & operations of war	7	0.8	3	9.7	10	1.0
"N" Code	Alternative Classification of Accidents, Poisoning & Violence (Nature of Injury)							
BN 47	N800-N829, N850-N869	Fractures, head injuries & internal injuries	328	35.2	32	103.2	360	37.4
BN 48	N940-N949	Burns	23	2.5	7	22.6	30	3.1
BN 49	N960-N979	Effects of poisons	46	4.9	14	45.2	60	6.2
BN 50	N830-N848, N870-N936, N950-N959, N980-N999	All other injuries	128	13.7	21	67.7	149	15.5

Table G

<u>Infant Mortality</u>							
<u>Rates per 1,000 Live Births - Manitoba - 1948-1967</u>							
1948	41	1953	35	1958	30	1963	25
1949	41	1954	29	1959	27	1964	26
1950	35	1955	31	1960	30	1965	23
1951	33	1956	31	1961	25	* 1966	21
1952	31	1957	32	1962	26	** 1967	22

* - Vital Statistics final figures 1948-1965 Dominion Bureau of Statistics figures.

** - Vital Statistics preliminary figures.

For purposes of statistical analysis, stillbirths are not included with live births and, therefore, do not enter in the calculations of "Infant Mortality".

Table H

<u>Deaths Due to Malignant Neoplasms Showing Main Sites-Manitoba 1967</u>						
	<u>Under 45</u>	<u>45- 64</u>	<u>65 & Over</u>	<u>Male</u>	<u>Female</u>	<u>All</u>
Buccal cavity & pharynx (140-8)	1	12	13	17	9	26
Digestive organs & peritoneum (150-159)	15	134	356	289	216	505
Respiratory system (160-165)	3	92	158	215	38	253
Breast (170)	18	54	44	1	115	116
Uterus (171-174)	1	19	28	-	48	48
Female Genital Organs (175-6)	3	19	12	-	34	34
Male Genital Organs (177-179)	3	7	76	86	-	86
Urinary Organs (180-181)	2	23	53	57	21	78
Skin (190-191)	1	6	8	8	7	15
Eyes (192)	-	1	1	2	-	2
Brain (193)	11	17	8	24	12	36
Others (194-199)	6	17	35	23	35	58
Neoplasms of lymphatic & haematop- oietic tissues (200-205)	35	34	76	84	61	145
Totals	99	435	868	806	596	1,402

Table I

Deaths Due to Diseases of the Circulatory SystemManitoba - 1967

	<u>Under 45</u>	<u>45- 64</u>	<u>65- 79</u>	<u>80 & Over</u>	<u>Male</u>	<u>Female</u>	<u>All</u>
<u>White:</u>							
Chronic rheumatic heart disease (410-416)	6	25	20	7	21	37	58
Arteriosclerotic & de- generative heart disease (420-422)	44	488	915	755	1,406	796	2,202
Other diseases of heart (430-434)	3	16	42	61	59	63	122
Hypertensive disease (440-447)	6	18	34	42	48	52	100
Diseases of arteries (450-456)	1	14	68	129	119	93	212
Diseases of veins & other diseases of circulatory system (460-468)	2	21	40	24	49	38	87
<u>Associated Conditions:</u>	<u>32</u>	<u>105</u>	<u>372</u>	<u>353</u>	<u>452</u>	<u>410</u>	<u>862</u>
Vascular lesions affect- ing central nervous system (330-334)	25	87	323	321	409	347	756
Chronic Nephritis (592)	4	3	5	7	13	6	19
Diabetes Mellitus (260)	3	15	44	25	30	57	87
Total	94	687	1,491	1,371	2,154	1,489	3,643
<u>Indian:</u>							
Chronic rheumatic heart disease (410-416)	2	-	1	-	1	2	3
Arteriosclerotic & degenerative heart disease (420-422)	1	4	9	9	13	10	23
Other diseases of heart (430-434)	-	1	2	1	3	1	4
Hypertensive disease (440-447)	-	-	1	1	1	1	2

Table I Continued

Deaths Due to Diseases of the Circulatory System

Manitoba - 1967

	<u>Under 45</u>	<u>45- 64</u>	<u>65- 79</u>	<u>80 & Over</u>	<u>Male</u>	<u>Female</u>	<u>All</u>
<u>Indians:</u>							
Diseases of Arteries (450-456)	-	1	1	2	1	3	4
Diseases of veins and other diseases of circulatory system (460-468)	-	-	-	1	-	1	1
<u>Associated Conditions:</u>	<u>5</u>	<u>3</u>	<u>5</u>	<u>1</u>	<u>3</u>	<u>11</u>	<u>14</u>
Vascular lesions affect- ing central nervous system (330-334)	3	3	4	1	3	8	11
Diabetes Mellitus (260)	2	-	1	-	-	3	3
Totals	8	9	19	15	22	29	51
White & Indian Totals	102	696	1,510	1,386	2,176	1,518	3,694

Table J

Deaths from Tuberculosis By Age, Sex & Type

Among White, Metis & Indian - Manitoba, 1967

	<u>Under 25</u>		<u>25 - 64</u>		<u>65 & Over</u>		
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>All</u>
<u>White:</u>							
Respiratory (001-008)	-	-	4	7	13	3	27
Other (010-019)	-	-	1	1	2	-	4
<u>Indian:</u>							
Other (010-019)	-	-	2	-	-	-	2
Totals	-	-	7	8	15	3	33

Table K

Number of Deaths Due to Motor Vehicle
Accidents and Other Accidents-Manitoba

1958 - 1967

<u>Year</u>	<u>Motor Vehicle Accidents</u>	<u>Other Accidents</u>	<u>Total Accidents</u>
1958	132	267	399
1959	153	271	424
1960	142	269	411
1961	160	289	449
1962	161	281	442
1963	189	283	472
1964	204	296	500
1965	201	297	498
* 1966	208	306	514
** 1967	190	309	499

* - Vital Statistics final figures.

** - Vital Statistics preliminary figures.

1958 - 1965 - Dominion Bureau of Statistics figures.

Table L

Revenue from Certificates Issued By

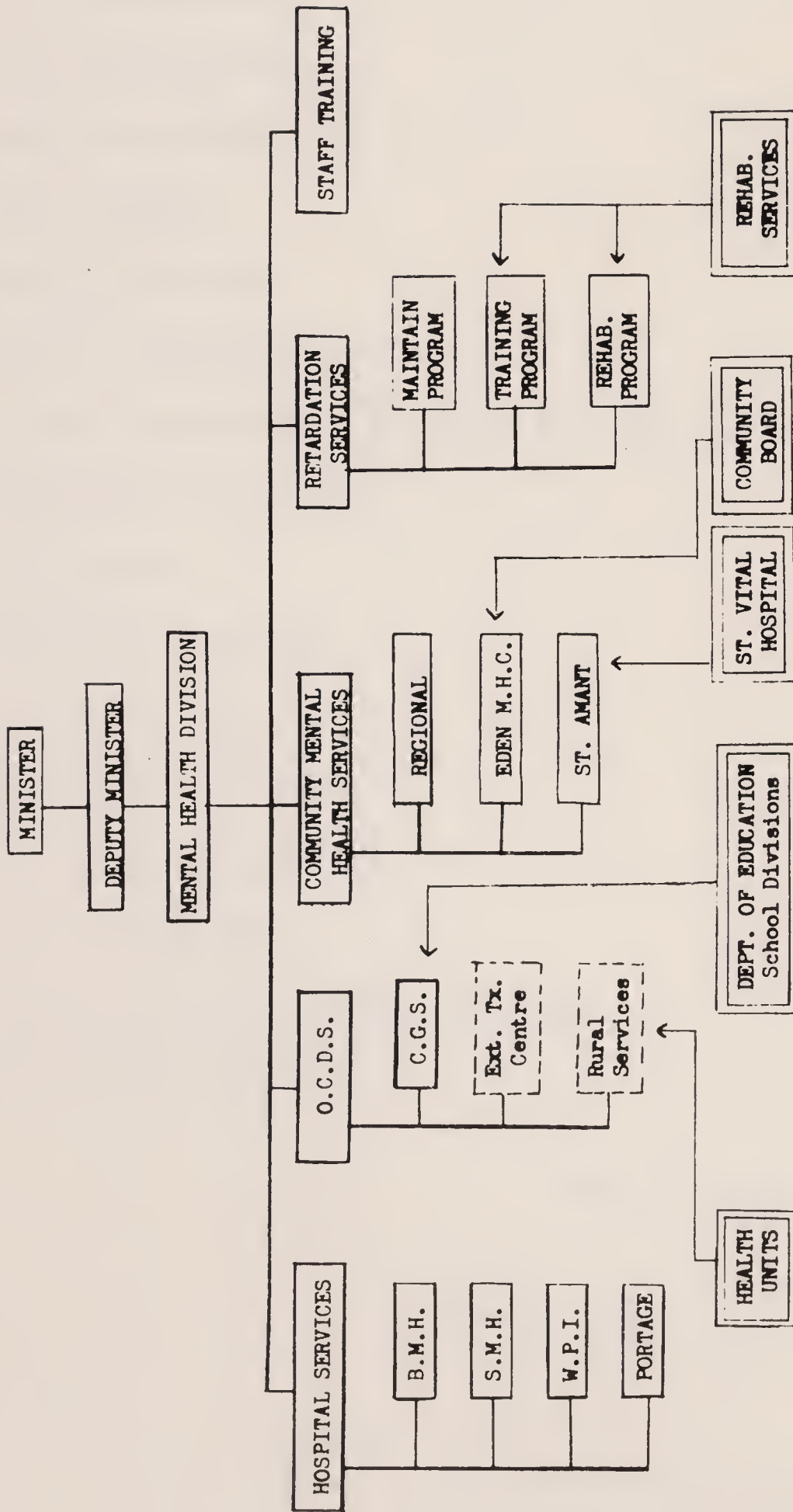
Division of Vital Statistics - 1963 - 1967

Sources of Revenue	1963	1964	1965	1966	1967
Birth Certificates	\$ 25,081.50	\$ 26,749.25	\$ 28,678.50	\$ 26,525.75	\$ 33,957.00
Death Certificates	2,304.00	2,439.75	2,420.75	2,332.50	2,521.50
Marriage Certificates	3,087.75	3,337.00	3,747.00	3,366.00	3,915.00
Fald Searches Made	17,978.75	19,005.00	20,521.50	19,790.50	24,628.75
Marriage Licences	22,718.00	23,466.00	24,741.00	24,150.00	28,675.00
Special Authorizations	770.00	920.00	985.00	1,125.00	1,220.00
Delayed Registrations	887.00	369.00	948.00	303.00	873.00
Corrections of Records	1,003.00	220.00	1,024.00	995.00	1,149.00
Legitimations	139.00	149.00	144.00	150.00	195.00
Adoptions	535.00	644.00	719.00	685.00	878.00
Miscellaneous	5,245.35	5,860.10	5,412.32	5,157.52	6,149.83
Totals	\$ 79,887.75	\$ 83,579.10	\$ 89,150.07	\$ 85,078.27	\$ 104,162.08

Table MRevenue from Certificates Issued Jan.-Dec.1967Division of Vital Statistics

<u>Sources of Revenue</u>	<u>Number</u>	<u>Revenue</u>
Birth Certificates	45,276	\$ 33,957.00
Death Certificates	3,362	2,521.50
Marriage Certificates	5,220	3,915.00
Paid Searches	49,258	24,628.75
Marriage Licences	6,749	28,543.00
Special Authorizations	244	1,220.00
Delayed Registrations	873	873.00
Corrections of Records	1,149	1,149.00
Legitimations	195	195.00
Adoptions Registered	878	878.00
Certified Copies	1,093	1,580.25
Dispensation of Banns	33	132.00
Money Order Commissions	-	296.31
Fees for Microfilm	-	4,076.70
Disinterment and Re-Burial Permits	25	50.00
Miscellaneous (Actual)	-	146.57
		<hr/>
	Total Revenue	104,162.08
		<hr/>

MENTAL HEALTH DIVISION



[] = facility or program
 [] = planned
 [] = other agency involved

B.M.H. - Brandon Mental Hospital
 S.M.H. - Selkirk Mental Hospital
 W.P.I. - Winnipeg Psychiatric Institute
 Portage- Manitoba School for Retardates
 O.C.D.S. - Office of Child Development Services
 C.G.S. - Child Guidance Clinic
 Eden M.H.C. - Eden Mental Health Centre

MENTAL HEALTH SERVICES DIVISION

The Division of Mental Health Services within the Department of Health is responsible for the development and maintenance of programs, services and facilities for those suffering from mental illness and mental retardation. Activities cover the complete spectrum of prevention, treatment and rehabilitation.

To accomplish this task the Mental Health Division:

- a) cooperates with individuals, organizations, hospitals, agencies and educational facilities to assist community endeavours leading to protection of mental health;
- b) encourages and participates in research projects designed to delineate factors operative in the cause and cure of mental illness;
- c) engages in extensive educational efforts to develop well trained personnel resources;
- d) conducts extensive programs of maintenance, training, treatment and care for the mentally retarded and emotionally ill;
- e) cooperates with community boards in the operation of facilities for care and treatment of the mentally disordered;
- f) directly operates a network of facilities giving broad-spectrum services in regional areas of the province.

Psychiatric services in Manitoba are centred in three hospitals for mental diseases and one institution for mentally retarded persons. These facilities are supplemented by four general hospitals in Winnipeg with approximately 150 psychiatric beds; the 135 bed St. Amant Ward

in St. Boniface for mentally retarded persons up to six years of age, the newly established Eden Mental Health Centre at Winkler and the Child Guidance Clinic of Greater Winnipeg (a branch of the Office of Child Development).

The reports of the various sections within the Mental Health Division for the past year present a total picture of unprecedented activity.

Admissions of patients to mental hospitals in 1967 showed an increase of slightly more than 12 percent compared to the previous year -- a remarkable increase in service demand. A considerable area of the increase represents early and therefore more effective detection of needed treatment.

Discharges of patients also increased so that in spite of increased admissions the total number of persons remaining in hospital was 110 less than at a similar date last year. This continues a trend of decreasing in-hospital population in the face of markedly increased service demand, a trend apparent for the last eight years. This trend indicates the effectiveness of treatment measures as one of the factors in increased social acceptance of the mentally ill.

Individual hospital reports all indicate increases in service with a marked increase evident in the treatment of persons without admission. Personal interviews for the three hospitals by medical staff alone totalled 27,500.

Eden Mental Health Centre

In the Spring of 1967 the Eden Mental Health Centre was opened in Winkler, Manitoba. This community mental health facility is sponsored by the Mennonite community in cooperation with the Division of Mental Health Services. It is operated by a community Board and

offers services to any person living south of Winnipeg. It appears to be successfully providing a needed regional facility.

As a venture in co-operation between local enterprise and government support, it is hoped this facility will provide a pattern for the development of other similar facilities.

Manitoba School for Retardates

This Institution has shown evidence of a dynamic move toward modern techniques in the field of mental retardation. Movement into and out of the school has accelerated and as a result more persons are able to benefit from training programs. Although there is still an unresolved waiting list for admission, its length has reduced. With planned additions of staff and facilities the program will be increasingly effective.

St. Amant Wards

This centre in St. Boniface continues to provide high quality care for young retarded individuals. This facility represents co-operation of the community and government in the operation of a mental retardation institution with enviable results.

Forensic Services in 1967 saw 217 persons on referral from the courts, probation services, etc. This level of activity represents a service that on a per capita basis is large compared to other areas in Canada. The problem of providing needed levels of assistance to court cases is of increasing scope. However, this service of the Winnipeg Psychiatric Institute is quietly and without publicity extending a good and expanding level of help.

The Mental Health Act has now been in operation for a sufficient length of time to give evidence of its effectiveness. Although there are some modifications that may be necessary, the

principles of the Act have proven valuable. The increased emphasis on treatment needs of the individual has materially assisted persons who need such care. Under the Act the number of voluntary admissions has steadily increased so that now about three quarters of all admissions are without compulsion. This and other evidence of its effectiveness mark the Act as a decided advance in legislation in regard to mental disorder.

Office of Child Development

The fairly recently established "Office of Child Development" will be responsible for the development of diagnostic, assessment, counselling and guidance programs designed to compliment other allied programs in the province. Work will be co-ordinated with the education department, local, public and private agencies and private practitioners.

The child development services office will deal with four major areas: pre-school, school age up to junior high, retardates and psychiatric services. Future expansion will encompass the senior high group.

Professional staff, including a consultant in psychology, a social worker, a speech and hearing clinician, a remedial reading clinician and an educational director will be working throughout the province on detection of handicaps in pre-schoolers.

Very few educable retarded are now identified before reaching school but with this new program the majority should be tentatively diagnosed at this early age. Eventually plans call for programs to help parents recognize the stages of development in children which can lead to earlier detection of mental problems.

It is possible that several years may be required before services of the "Office of Child Development" reaches its full potential.

The Mental Health Division is encouraged by the evidence of acceptance of its efforts by the population at large. Many more persons in need of care or treatment are now able to make use of programs and facilities. This in turn leads to the increased activities that are delineated in the reports of specific facilities that follow.

PSYCHIATRIC INSTITUTE

The Psychiatric Institute serves as a regional hospital for the Metropolitan Winnipeg area and that part of the province lying to the south and east. This 56 bed hospital serves as a short-term treatment and diagnostic centre.

Patients are referred to the hospital for assessment and for treatment from such sources as general practitioners, private psychiatrists, general hospitals, other psychiatric hospitals, courts, probation services, prisons, social agencies, and the University counselling service. The 24-hour emergency psychiatric service operated in conjunction with the psychiatric unit of the Winnipeg General Hospital accounts for a fair proportion of all admissions to the Psychiatric Institute. Self referrals are assessed by the emergency or out-patient department before admission to hospital.

Trends reported in previous years continue, with increasing demands for both in-patient and out-patient services.

Admissions

Statistics for 1967 show a total of 976 admissions, an increase of 48 over the previous year. With an average duration of patient stay in hospital of 19.39 days (19.74 in 1966), increase of admissions in future will only be possible if in-patient facilities are increased or if there is an increase in the number of patients transferred to mental hospitals from the Psychiatric Institute. The bed occupancy rate remains the highest in the Winnipeg General Hospital complex.

With the exception of a few beds in some general hospitals, all compulsory patients are admitted to the Psychiatric Institute. Nevertheless there has been a significant decrease in the percentage

of compulsory admissions - a drop to 17 percent from 30 percent of total admissions in the previous year. This is probably the result of the 1965 Mental Health Act which enables patients to be admitted to hospital with no more formality than for admission of physically ill patients to a general hospital.

Transfers to Mental Hospitals

The number of patients transferred to mental hospitals for further treatment in 1967 increased significantly over the two previous years.

	<u>1965</u>	<u>1966</u>	<u>1967</u>
Number of transfers	195	162	278

Special Problem Groups

As in previous years children and old patients pose special discharge problems once treatment of their acute illness is completed due mainly to lack of community facilities. Transfer to mental hospital of demented old people is at times necessary, not because this is warranted by their mental state, but because nursing homes have no vacancies or refuse to accept ex "Psycho" patients.

Out-Patient Department

Patients are referred to the out-patient department from a wide variety of sources, for examination and treatment. Former in-patients are followed up in the out-patient department.

Recent methods of treatment (drugs, E.C.T., various social measures) have resulted in:

- (a) shorter periods of hospitalization
- (b) increase in the rate of readmission
- (c) increase in the number of out-patients. Many of the out-patients are "chronically" ill from the outset and

will probably have to receive treatment for many years, perhaps for the rest of their lives.

It is not surprising therefore that the out-patient load has continued to increase.

	<u>1965</u>	<u>1966</u>	<u>1967</u>
Total Number of Out-Patient Visits	6,888	8,124	9,881

Forensic Psychiatry

The Psychiatric Institute continues to serve as the forensic clinic for Winnipeg and some rural areas. A total of 217 offenders were examined in the Out-Patient Department at the request of the police courts, probation service, etc. Forty-five of these were admitted to hospital for a period of observation and treatment.

Psychology Department

This department has continued to function in four basic areas - diagnostic testing, psychotherapy, teaching and research.

The two staff psychologists have visited many Winnipeg municipalities and rural areas for the purpose of examining school children with learning difficulties at the request of school boards.

Social Service Department

Six social workers have handled their ever-increasing case load with the same efficiency as in the past. Their responsibilities include: admitting, screening of out-patients, contact with relatives, liaison with other social agencies, home visits. An influx of former patients of Brandon Mental Hospital who have been staying in foster homes have increased the social service case load in 1967.

Occupational Therapy

This branch has maintained a well organized program of activity and recreation throughout the year.

Teaching

The Psychiatric Institute remains an important centre for the teaching of undergraduate medical students, post-graduate psychiatric residents, student nurses, physiotherapy and occupational therapy students.

PSYCHIATRIC INSTITUTE

Movement of Patients - Statistical Summary	<u>1967</u>	<u>1966</u>
Remaining in hospital December 31, 1966 - 47		
<u>Admissions</u>		
Total Admissions	976	928
(Less transfers from Mental Hospitals Brandon, Selkirk, Portage la Prairie)	19	16
Total Direct Admissions	957	912
<u>Methods of Admission</u>		
Non-Compulsory	835	606
Compulsory	141	318
Total Patients under Treatment	1023	985
<u>Separations</u>		
Direct Discharges	689	754
Transfers to other Mental Hospitals	278	162
Total Discharges	967	936
Deaths	3	2
Total Separations	970	938
Remaining in hospital December 31, 1967 - 53		
Percentages deaths of total under treatment	.29	.2
Average daily population	54.42	53.28
Average duration of stay	19.39	19.74
Rated capacity of hospital	56	56

BRANDON HOSPITAL FOR MENTAL DISEASES

The Brandon Hospital for Mental Diseases functions as a regional psychiatric facility for an area encompassing some 25,000 square miles, extending west of Winnipeg and to the northernmost points in the Province such as the Municipalities of Flin Flon and Thompson. Services are supplied essentially to a rural area, and to more than one-third of the population of the province.

In addition to hospital occupancy of some 1,000 in-patients, considerable out-patient and related community mental health activities are rendered for both children and adults, while travelling clinics regularly visit seven out of ten health units within this region.

Psychiatric and paramedical consultation and treatment is undertaken at the local general hospitals, and the hospital complex remains a major site for referral from courts, schools, Children's Aid Society, and other community agencies. In fulfilling another basic objective, various teaching and research programs have been initiated, and previous related endeavours have progressed throughout the year.

The unitary-sectioning system, initiated in 1961 primarily to cope more efficiently with the large catchment area, and rephased three years ago, has been continued. This system involves three comprehensive psychiatric teams serving their own geographical regions, and referred to respectively as Northern, Eastern and Western sections. Each division corresponds to existing designated Public Health areas. A fourth psychiatric division is primarily involved in Child Psychiatry. This arrangement has been successful in strengthening the liaison with, and utilization of, other community resources, as the emphasis continues on the policy that hospitalization is but one phase of the patient's

treatment. Professional personnel continue their outward movement into the community to undertake preventative, early detection, consultation, home care, treatment, and after-care services.

Acute Treatment Services

Acute treatment facilities are available to all psychiatric teams. The total bed capacity for such purposes is 180 - 200. The over-all workload over the year has totalled 625 admissions, including 30 patients under the age of 16. The admission rate is thus almost identical to that in 1966 (total 624). This may possibly be indicative of a plateau effect in terms of the population and the morbidity of the catchment area, although it seems more probable that handling of patients on an out-patient - day care - follow-up basis may be effective in preventing a further increase in the numbers of admissions.

Direct first admissions account for 53.4 percent of the total admissions, and 51 percent of all admissions have been on a Non-Compulsory basis. The distribution of admissions according to in-patient psychiatric teams is as follows:

Team I	(Eastern)	33.9%
Team II	(Western)	35.3%
Team III	(Northern)	27.8%

The remaining 3.0 percent were admitted direct to infirmary-geriatric services.

It is noteworthy that the distribution of admissions from these geographical areas has remained fairly consistent over the past several years.

The main stay of an in-service program depends upon the effectiveness of the treatment given to the acutely ill. This year the percentage discharge of total admissions of 110.2 percent is the

highest discharge rate yet achieved. This clearly indicates the effectiveness of treatment programs, which include the use of:

1. Psychotherapy (individual and group).
2. Pharmacotherapy (mainly Phenothiazines, Butyrophenones, Anti-Depressants and Diazepam derivatives). These Chemotherapeutic agents are being used with more specific application to target symptom clusters in contrast to earlier prescribing in a more empirical fashion.
3. Electrotherapy - 259 new cases commenced treatment. Total number of treatments given for the year was 2,928.
4. Milieu Therapy.
5. Social, including family casework, therapeutic community approaches, programmed work, recreational and rehabilitation procedures.

The therapeutic regime adopted from this spectrum of proven therapies is tailored to meet the individual's needs. However, emphasis in treatment has also been placed on the group and therapeutic community approach, attempts being made to structure the environment as fully as possible to provide "living-learning" experience for the groups and the individual. There has been an intensification of our efforts to integrate male and female divisions in the realms of social functioning and activity therapies.

Systemic desensitization by reciprocal inhibition in phobic disorders, and more recently in the complex neurotic states, is being increasingly used.

Acute services are also making more use of Alcoholics Anonymous, Al-Anon, and Alcoholism Foundation resources, the most valuable of which has been the thrice weekly group meetings of A.F.M.

and the registered A.A. North Hill Group Meetings, both held within the confines of the Hospital. In regard to Alcoholism, deconditioning procedures, with the use of Antabuse and its analogues, have been virtually discontinued, as they have proved less efficacious than the combined use of Diazepam and such group involvement.

The acute treatment services have occupied the preponderant amount of effort of nine physicians with their allotted complement of nursing staff, psychologists, social service personnel, and activity therapists. The philosophy of the team approach continues to be emphasized, encouraging the utilization of all professional personnel in the treatment process.

As a result of these therapeutic programs, encouraging results have been forthcoming, to the extent that the return of the acutely ill patient to the community is of relatively short duration. The average length of stay of a patient discharged within a year is slightly under three months.

Rehabilitation Services:

These services have a total capacity of approximately 560 beds, which is a reduction of some 80 beds over the past year.

Emphasis is placed on social rehabilitation programs, in which methods to counter regression using remotivational techniques, creative occupational therapy, industrial work therapy, recreational activities, interest groups and group psychotherapy are employed. These programs involve initial and

continuing assessment of long-stay patients as they progress through levels of activity and treatment toward the goal of becoming useful members of society. Concomitantly each patient is assessed and given specific psychiatric treatment for his basic psychotic condition.

Some of the interesting rehabilitation projects include:

1. A special study and assessment was made on small groups of patients in an attempt to evaluate different methods of the group therapy approach. In this evaluation behaviour rating scales were used to assess the results, which were compared against a control group. The findings to date require further study for full evaluation.
2. A most interesting pilot program conducted with a group of some 20 severely regressed patients, where they were allowed to display free emotive expression through the medium of color-form oil painting, was undertaken. This program resulted in a communicative break-through with many of those afflicted.
3. Lines of communication have been intensified between the hospital and the Alcoholics-Anonymous groups, and increasing use is being made of these groups both within the hospital and at the community level in the rehabilitation of the alcoholic.
4. A small unit utilizing operant conditioning methods aimed to extinguish disrupted behaviour and to reinforce and shape socially desirable conduct, was undertaken with a mixed group (male and female) chronic regressed psychotic patients, commencing in August

1967. Five out of nine patients are presently nearing "graduation" from this unit to a better level of functioning which will allow them to participate in higher levels of our rehabilitation programs. Because of this program's initial success, it is planned to increase the number of patients involved as soon as staff become more educated and familiar with the techniques used. This would appear to be a valuable rehabilitation technique, especially in the very regressed patient.

5. The housekeeping projects, wherein female patients re-learn domestic and culinary skills, continues. These patients undertake the usual domestic feminine pursuits preparing and cooking meals within a domestic setting for themselves and for a group of long-stay male patients. An interesting sideline to this program is that these male patients have shown a noticeable improvement in table manners, general appearance, and increased participation in social relationships.
6. Organized summer recreational therapy was conducted as in the past year. A highlight of these summer activities was a week-long excursion to the Covenant Heights Church Camp west of Onanole, Manitoba, on Clear Lake. This camp has excellent facilities for group camping, and some 45 long-stay male patients from this hospital spent a full week there. Everyone participated in all activities. Most patients showed more initiative and functioned with greater interest than was usual within the hospital setting. Patient interaction flourished along with patient representation in the organization of their day-to-day activities. This was a most successful program and it is anticipated that it will continue, and, if possible, grow, in the coming year.

Regular meetings of all members of the psychiatric teams play a prominent role leading to a more coordinated approach throughout all rehabilitation programming. Extensive extramural activities supplement the in-hospital portion of the program. This is often done in conjunction with other agencies. These activities include work assessment and training (with the Provincial Coordinator of Rehabilitation at the Rehabilitation Industries of Western Manitoba, Brandon); financial support (through the Department of Welfare); upgrading and employment (through the Department of Education and Manpower Centre); foster home placement (with the assistance of the Brandon Branch, Canadian Mental Health Association) and various recreational and motivational programs (with volunteer groups from service clubs, church groups, Brandon University students and Canadian Mental Health Association).

Infirm and Care Services

These services are provided for some 250 infirm and geriatric patients. The disability within this group varies markedly in intensity. Some 100 patients at any one time could be classified as having a more serious degree of infirmity requiring hospital treatment. On a day-to-day basis the acutely physically ill number some 25 patients. The remaining 150 are senile-geriatric, who may properly be described as "requiring care with necessary medical, nursing and social work services", rather than requiring full hospital treatment. We have initiated a more thorough assessment of this latter group with a view to setting up services on the lines of a special care facility as distinguished from treatment of the mentally ill.

A full-time physician is employed in the treatment of the physically ill patients, and assistance is given through consultation with specialists in the City of Brandon. During the year there have been some 226 such consultations. There were 43 major surgical procedures performed on patients at the Brandon General Hospital, while many minor surgical cases were treated within the hospital.

Day and Night Care Services

During 1967 there was a total number of 82 new referrals for day care, and on December 31, 1967, the total number in attendance was 103 patients, with an average daily attendance of 45 patients. This unit discharged 35 patients during the year.

New referrals for night care numbered 17, the total patient nights night care being 706 over the year, which is an increase of over 64 percent compared to 1966.

Within the day care centre the long-acting Fluphenazine Enanthate has been administered successfully on a 2-weekly basis to a number of chronic schizophrenic patients who were particularly difficult on being maintained on oral phenothiazines.

Daily individual and group therapy sessions are held within the unit, and electroplexy administered where required. Further, most of the patients participate in other organized hospital programs.

Out-Patient and Community Services

Adult out-patient services are provided by all psychiatric teams for their designated geographic areas as much as possible. The management of out-patients absorbs a considerable treatment time of five psychiatrists. A more intensive follow-up program for discharged in-patients has been instituted with increasing involvement of the

public health units and family physicians. A monthly visit is made to Dauphin as part of this program. In addition, the Travelling Clinic holds Community Mental Health Clinics in Virden, Birtle, Neepawa, Dauphin, Swan River, The Pas and Flin Flon. Although service is given primarily to children, this clinic does, on request, deal with adult referrals. The number of adults seen who were not former in-patients totals 917, which represents a 30 percent increase, with a proportionate increase in the number of total interviews. Likewise, the number of follow-ups on former in-patients has increased by 33 percent. The number of patients seen in Community Mental Health Clinics and in General Hospitals has risen by 26 percent over the previous year. The total number of adult out-patients seen in 1967 increased by 32 percent over 1966.

Child Psychiatry

Up until July 1, 1967, two full-time psychiatrists, and since then one psychiatrist, has been responsible for child psychiatry on an out-patient basis. These physicians, with their complement of psychologists, social service personnel and speech therapist, hold guidance clinics in a unit within the hospital complex, in addition to providing travelling clinic service to the above localities. There has been considerable work undertaken by the clinic in special education facilities, i.e. retarded school, ungraded class, remedial program, or slow-learning situation. The result has been that psychologists, particularly, have provided more direct counselling to teachers in special classes at the classroom level so that they are able to observe more directly the problems which teachers have in the special education setting. A notable recent development has been the

expanding services of the Special Education Branch. In close association with schools a review of the progress made in services to school children was undertaken. For example, special problems of some 200 children in the Brandon schools, in conjunction with school authorities, was investigated, where some students were re-allocated to fit into the newer developments in the curriculum for special education.

The result of all this emphasis on activity in relationship to problems that school children face, has been a continued realization that children frequently suffer from multiple handicaps such as learning difficulties, social and emotional adjustments, developmental variations and physical problems, so that our team approach which stresses the clinical evaluation seems to offer the most productive and effective solution to these difficulties.

The developments of an integrating nature are proceeding with the Office of Child Development Services.

The total number of Child Guidance Clinic patients seen in 1967 is only slightly increased over the previous year. The fact that there has been a reduction in the number of professional personnel available for such services during the last six months makes this all the more commendable.

In performing out-patient and Community Mental Health activities a total of 7,250 medical interviews were conducted.

A qualified teacher on the establishment of the Special Education Branch, allotted to duties within this hospital, was appointed in October 1967. She is responsible for providing a program of educational instruction to children under the age of 16 years residing in the hospital. These generally number approximately 12 or

more at any one time. We anticipate that this will make our therapeutic program for young children much more effective. Supervision and direction in terms of psychiatric and psychological aspects that such children present, is being provided for by the Guidance Clinic staff. Having a teacher also provides the opportunity for the child psychiatry section to assist the local communities in day care psychiatric service for some children in disruptive crises.

PROFESSIONAL SERVICES:

Medical Services

These have been conducted as previously described in this report, by a total of 12 physicians, including five senior psychiatrists, two partially trained psychiatrists, four untrained, and one physician involved in physical medicine.

Psychological Services

These services are carried out by eight full-time and one part-time psychologists, including three senior and six assistant trainees (B.A. level). This department has had a considerable turn-over in staff in 1967, involving both senior and trainee levels.

Two summer relief B.A. "Psychologists" received educational assistance to undertake further studies at the Master's level.

Seventy-five percent of the total patients referred to this department continue to be children.

There has been a 76 percent increase in psychological assessments of in-patients in 1967. These assessments make up 13 percent of the total number of all patients seen.

There has been an over-all increase of four percent in the total number of all varieties of patients seen by this department.

A total of 7,810 tests were performed on 2,106 patients, an increase of 24 percent in the total number of tests over the previous year. This is largely due to more comprehensive testing of persons with perceptual and learning disabilities. Total number of children assessed was 1,066, the request of educational authorities, mainly for ungraded class placement and school readiness assessments. Many of these were referrals originating in our area, which came directly through the Office of Child Development Services. It is anticipated that many more O.C.D.S. referrals will be forthcoming as school divisions try to fulfill the mandatory legislation to establish classes for special education.

Over 900 hours were spent in counselling, and 1,900 hours on community work.

Social Services

Recently three graduates of the Welfare Technology Course offered at the Manitoba Vocational Centre in Brandon, joined the social service staff of the hospital, bringing the total complement to 13 full-time and one part-time personnel, including one Social Work Administrator, one Social Worker, and 12 Rehabilitation Counsellors.

The staff of this department are assigned to various psychiatric services as members of a multi-discipline psychiatric team, performing a variety of hospital and Community Mental Health duties, including comprehensive discharge and rehabilitation planning. A significant function performed by such workers is the behavior reinforcement that many of these patients require when re-established within the community, and alleviation of social breakdown in patients' families. They work in close liaison with numerous community agencies and

resources, and play a significant part in the education of such groups regarding Mental Health Programs.

The area of follow-up is an important aspect in the department's functioning, taking into consideration the extensive geography involved. Social field workers of this department, in 1967, travelled almost 90,000 miles.

Social services have been given to an accumulated total of some 6,000 patients.

This year 126 patients have been placed in alternate accommodation, this varying according to the need, and has ranged from nursing homes, senior citizens' homes, foster homes, and adequate room and board accommodation.

As of December 31, 1967, 225 patients have been placed in foster homes. In addition, as of the same date, a total of 226 placements have been made in the City of Winnipeg. An alternative arrangement to the involvement of our limited numbers of social service personnel in the follow-up of patients residing in Winnipeg, should be considered.

Many of our patients in the Brandon foster homes attend our day care facility or Rehabilitation Industries of Western Manitoba, and continue under the supervision of this department.

There were 1,081 new referrals, involving some 747 social histories; almost 12,000 interviews, and 3,300 total visits. As an indicator of increased activity, this represents an 86 percent increase in the number of visits, and an almost 40 percent increase in the number of interviews.

Nursing Services

As of December 31, 1967, a total of 167 Licensed Nurses, complemented by 80 Nurse Aids and 43 Nursing Attendants, comprised the nursing staff of the hospital. The problem of the retention of our qualified nursing staff has become serious.

During the year there were 58 appointments to, and 109 resignations, retirements, deaths, etc., from permanent nursing staff, making an over-all deficit of 51 qualified nurses. This trend has had to be countered by the employment of Nursing Aids and Attendants.

Dental Services

During 1967 the total number of visits to the hospital dentist was 3,626, an increase of more than 16% over last year. As the hospital population continues to decrease, the frequency of individual dental check-ups consequently increases, so that Prophylaxes (cleaning, scaling, polishing, etc.) plays a prominent part in our hospital dental program. This has increased by almost 18 percent this year.

An interesting observation noted by the dentist is that some types of medication used in psychiatric treatment seem to be the cause of decalcification and destruction of the teeth, together with dryness of mouth and loose dentures.

Pharmacy Services

The Pharmacy Department is operated by a qualified pharmacist and one lay assistant who has several years' experience in hospital pharmacy work. For teaching purposes a senior nursing student spends a two-week rotation in the pharmacy. The prime objectives of the pharmacy are:

1. The provision of medication on an in-hospital and community basis.

2. Acquisition, storage and dispensing of these in as economical a manner as possible.
3. Provision of a drug information service.
4. Through a Pharmacy Committee, review of medications and related procedures. This Committee meets regularly and has currently reviewed the hospital formulary.

The daily total of requisitions filled has remained at a fairly stable figure of 120 - 140 as in previous years.

A total of 25,351 out-patient prescriptions was filled during 1967 - a 30 percent increase. This is an average of 2,112 per month, representing an average daily prescription of 100.6.

The average number of prescriptions filled per month for the last five years is as follows:

<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
769	1232	1438	1538	2112

For the fiscal year ending March 31, 1967, the total expenditure for medications was \$188,671.00.

Average prescription cost has been slightly reduced over last year, and now stands at \$3.36.

Speech Therapy Department

This department has been operated by a Speech Pathologist who has been at Brandon a year, and added to the assessment, diagnosis and treatment of such speech and language disorders as:

- Maturational lag
- Apraxia
- Dysarthria
- Aphasia
- Stutterers
- Dysphonia
- Perceptual impairments
- Cleft palate
- Hard-of-hearing
- Voice disorders

Patients are seen at:

The Guidance Clinic, Brandon.

Travelling Clinics at Dauphin, Birtle, Virden, Neepawa,
Swan River, the Pas, and Flin Flon.

Assiniboine Hospital - one-half day per week.

Hard-of-Hearing Class - one-half day per week.

Central School, Brandon.

Statistics:

First Assessments:	Adults-Brandon	16
	Children-Brandon	58
	Adults-Travelling Clinic	7
	Children-Travelling Clinic	102
Follow-up:	Adults-Brandon	297
	Children-Brandon	345
	Adults-Travelling Clinic	10
	Children-Travelling Clinic	160
Total Adults Seen:	330	
Total Children seen:	665	
In addition, Parent Interviews:	547	

OTHER SERVICES

Activity Services

Twenty-two Activity Instructors and 15 Activity Aids are employed in these services. Services cover the fields of recreational, occupational and industrial work therapy. Recreational programs can be divided into two major groups - those in which the patient actively participates, and those which are used for their entertainment value. These include sports and games such as curling, skating, tennis, miniature golf, dances, concerts, etc. Many recreational pursuits take place away from the hospital complex, for example (figures in parenthesis represent number of patients involved): bowling (80 per week), summer camping (242); attendance at Brandon Wheat King hockey games

(30 per game); social recreational programs organized by C.M.H.A. (15 per week); Brandon Winter Fair (160); Manitoba Provincial Exhibition (180). Occupational therapy involves creative work for self expression and fulfillment, while industrial therapy is designed to preserve and improve good work habits, with emphasis on promptness, output, and ability to work harmoniously with others while engaged in contract work.

During 1967 a total of 898 patients, including 116 out-patients, participated in occupational therapy programs, of which 429 were new referrals. A special activity feature is the beauty parlour, the objectives of which are two-fold: training patients in the art of beauty culture, and to increase the patient's self-respect by improving her personal appearance.

A total of 362 patients participated in the hospital's industrial therapy programs, including 204 new referrals, with some 240 patients on the industrial therapy payroll. In addition, 40 patients attended Rehabilitation Industries of Manitoba Workshops located in the City of Brandon.

Electroencephalography Examinations

Eight hundred and fifty-two E.E.G. examinations were performed in 1967, an identical number to that performed in 1966. Of this number 494 were in-patients, 80 out-patients, 56 child guidance, 211 outside referrals, and 11 for purposes of the court.

A new 16 Channel Grass E.E.G. Machine has been purchased, and delivery is expected in the very near future.

Laboratory Services and School of Medical Technology

On the laboratory staff there is a Pathologist, eight Registered Technicians, and one Laboratory Assistant. Services provided to this hospital include:

1. Provision of laboratory services to the patients of the hospital, including:
 - (a) Diagnostic
 - (b) Sanitary and Preventive
 - (c) Research Service
2. Training of Medical Technologists.
3. Examinations of the referred specimens from the health units and rural hospitals.
4. Provision of partial laboratory services to the Sanatorium Board Laboratories.
5. Provision of laboratory services to individual physicians requesting special tests.
6. Tuberculosis control of the hospital population.
7. Continuation of education for Medical Technologists.

Total examinations numbered 153,144, involving 290,040 units of work.

654 Electrocardiograms were recorded and interpreted.

129 autopsies were performed, 104 being complete.

44 autopsies were performed in the hospital, which represents 74% of total deaths of 62.

The Brandon Training School for Medical Technologists affiliates with Children's Hospital and The Manitoba Institute of Technology, Winnipeg.

The Committee of Medical Technician Training Program has

introduced new courses for this year, with intakes in September, November, January and March.

During 1967, 20 students completed the training for Combined Medical Technologists and one student completed the training for Straight Laboratory Technologists, wrote the Canadian Society of Laboratory Technologists Examinations, and were placed in positions.

Five students are at present in second year training in Medical and Radiological technique.

Four students are at present in second year training in Straight Laboratory Technique.

Eight students affiliated at the Brandon School for Laboratory Technologists during June and July.

We commend Mrs. Elsie Demchuk (nee Gullett), who received the Canadian Society of Laboratory Technologists Pin for the highest standing in the 1966 examinations in Manitoba. Nine students from this training school were recognized in such a way since the School was approved for training in 1956.

Biochemistry Department

The personnel in this department include a Biochemist, one Chemist, one Medical Technician and one Laboratory Assistant.

Some 3,232 biochemical tests were done, involving some 22,716 units of work.

Percentage Distribution of Biochemistry Work done for the following centres:

Government Laboratories (BMH, Lab. & X-Ray)	68.8%
Others: (B.G.H., Assiniboine Hospital, Clinic, etc.)	31.2%

During the summer months a B.Sc. (Med.) Student completed his

graduate work under the sponsorship of the Department of Psychiatry, Faculty of Medicine, University of Manitoba, doing research on the compound 2, 4-dimethoxyphenylethylamine and its levels in schizophrenic patients.

Additional space was added to the Biochemistry Department and a P.B.I., Autoanalyzer equipment installed.

Radiology Department

This department is operated by a part-time Consultant Radiologist and a Registered X-Ray Technician.

Reviews and reports are made monthly on the current T.B. Recheck chest x-rays and films of any person with past history or suspicious respiratory systems, including those persons with positive Mantoux readings of 'three plus or greater'. As of December 31, 1967, a total of 1,503 cases have been reviewed, including 27 admissions who revealed strongly positive mantoux findings.

The Annual Chest X-Ray Survey was carried out in the spring of 1967 in the x-ray department. At this time 1,272 persons were x-rayed, including 287 staff. Although no active cases of tuberculosis were discovered at this time, 25 persons were added to the recheck list for further investigation. During the past 11 months, 41 persons received investigation and were added to the recheck list, while 33 persons were removed from the list due to death, discharge, etc., bringing the present total of persons being regularly reviewed to 185, of whom 14 are staff members. Of this number one male patient and three female patients are receiving anti-tuberculosis drugs.

A new General Electric Monitrol 15 Radiographic Table and Transverse Ceiling Tube Hanger were installed and connected to operate with the present General Electric generator.

During the year the total number of examinations undertaken by this department was 3,484, using 6,453 films.

Forty fractures were incurred throughout the year, which is considerably less than the number in the previous five years.

Accounting

Statement of Expenditures and Per-Capita Costs for Fiscal Year ending March 31, 1967:

Average Daily Population	1123.	Decrease of 67 compared to 1966
Total Gross Expenditures	\$3,429,226.44	Increase of \$263,227.18 over 1966
Net Costs	3,291,747.98	Increase of \$267,199.34 over 1966
Annual per-capita Cost	2,931.2092	Increase of \$389.5721 over 1966
Daily per-capita Cost	8.0305	Increase of \$1.0675.

This daily per-capita cost increase is broken down as follows:

Salaries	\$.9846
Supplies, Equipment, Expenses	<u>.0829</u>
	\$ 1.0675

Actual Patient per diem cost
on Food -
(.9320 less staff mtce. .1639)\$.7681

Daily per-capita Costs, detailed by Sub-Departments:

	<u>1966-67</u>	<u>1965-66</u>	<u>Incr.</u>	<u>Decr.</u>
Department of Health				
Salaries & Supplies	\$ 7.1484	\$ 6.1613	.9871	
Farm	.1326	.0931	.0395	
Dept of Public Works	.6783	.6342	.0441	
Federal Health Grants	<u>.0712</u>	<u>.0744</u>		<u>.0032</u>
	\$ 8.0305	\$ 6.9630	\$1.0675	

TEACHING, EDUCATION AND RESEARCH PROGRAMS

Teaching Programs

Teaching in psychiatry and related fields is increasing, and the hospital teaching programs cover a wide range. These include -

1. The hospital recently became re-integrated with the Post-Graduate Program of "The University of Manitoba" for the educational training of Fourth Year Psychiatric Residents leading to the Diploma in Psychiatry of the University of Manitoba, and eligibility to write the examinations for Certification with the Royal College of Physicians and Surgeons (Canada). In addition to formal presentations in Winnipeg by the Department of Psychiatry, a full program of scheduled seminars involving not only Fourth Year Residents but all our psychiatric personnel, is in operation. Current and pertinent psychiatric literature presented by Residents and others is studied and reviewed on a monthly basis.
2. A two-day Clinical Program is presented for final year Psychology Students of the University of Brandon (in groups of 14).
3. The Nursing School presents -
 - (a) A three-year Course for the training of psychiatric nurses under the hospital's Nursing School. 74 students were enrolled in the School of Nursing, and during the year the graduating class totalled 20.
 - (b) A six-month Post-Graduate Course for Registered Nurses leading to a Diploma in Psychiatric Nursing. Ten Registered Nurses were enrolled during the year, and 9 graduated.
 - (c) A thrice yearly 12-week psychiatric affiliation for student nurses from the Children's Hospital, Winnipeg, and the Brandon

General Hospital. Total affiliating nurses numbers 45.

(d) A twice yearly 24-week psychiatric affiliation for students from the Manitoba School for Retardates, Portage la Prairie. Seventeen students affiliated.

(e) A 40-hour course of instruction for 25 hospital Nurse Aids and Attendants.

(f) A recently instigated In-Service Education Program for hospital nursing staff was begun.

4. Arrangements have been made for the Chief Psychologist and Senior Social Worker to conduct lectures and demonstrations to students of Psychology and Sociology at the University of Brandon.
5. Various lectures to other students enrolled at the Brandon University; professional groups such as the local Medical Society, Pharmaceutical Society and Manitoba Vocational Centre, Brandon, etc.
6. The Brandon Training School for Medical Technologists affiliates with Children's Hospital and The Manitoba Institute of Technology, Winnipeg. New courses were introduced this year with enrolments in September (1966), November (1966), January (1967) and March (1967). Twenty-one students who completed the training, were successful in the Canadian Society of Laboratory Technologists' Examinations, and were placed in positions.

Education Program

1. During the year two B.A. Psychologists received educational assistance to undertake further studies at the Master's level.
2. One Rehabilitation Counsellor at the B.A. level commenced Educational Leave to undertake studies leading to Master's Degree, at the School of Social Work, University of Manitoba.

3. The Research Assistant and a Nurse Supervisor attended the Work Study Course at the Institute of Management, Winnipeg, in the past three months, as part of the Provincial Government's Operational Research Project.
4. The Bursar continues on his second year of the Hospital Organization and Management Course sponsored by the Canadian Hospital Association.
5. Several physicians, nurses, speech therapist and other staff attended various Institutes, Conferences, Symposia and Post-Graduate Studies throughout the year.

One physician was successful in obtaining his C.R.C.P.S. (Canada).

Two other staff members returned following completion of their University Studies, viz, Hospital Administrator (D.H.A. Toronto), and Chief Psychologist (M.A. Manitoba).

The head clerk in the personnel office obtained a certificate in departmental management sponsored by the Canadian Hospital Association.

Research Program

1. The major statistical research project engaged in this year was the "Evaluation of Community Psychiatric Services", supported by Federal Health Grant 606-7-112. The final report on this project is now nearing completion.
2. The new research project, No. 606-7-160, "Follow-up Study of Children Treated at a Child Guidance Clinic over a Ten Year Period" was approved, starting December 1, 1967.
3. The Research Assistant has supplied material to a California research group who are conducting an international survey of State-related Rehabilitative Measures Within and Without Hospitals for the

Mentally Ill. They were particularly interested in our Foster Home Program, Mental Health Industries, and Rehabilitation Industries of Western Manitoba.

4. The Research Assistant has been engaged in preparing statistics on evaluations in our behavioral therapy studies.
5. Clinical Research undertaken by psychiatrists has included:
 - (a) Use of Lithium Carbonate in the management of excited patients and agitated depressives.
 - (b) Continued investigation in the use of various drugs, e.g. Intramuscular Fluphenazine Enanthate and Proketazine (phenothiazine derivatives); Tegretol and Cyheptamide (anti-convulsant).
 - (c) Limited trials are in progress using reciprocal inhibition and conditioning methods.
6. Our Psychologist's Department is researching:
 - (a) The effects of E.C.T. (unilateral and bilateral applications) on memory and the alleged effects of a drug in countering E.C.T. induced memory deficit.
 - (b) Reinforcement schedules applying learning theory in the modification of behaviour within the behavioural therapy unit.
 - (c) Several educational programs for the trainable mentally handicapped in conjunction with the University of Brandon, who have recently been endowed with a research fund from the Canadian Association of Retarded Children.
7. Under the sponsorship of the Department of Psychiatry, Faculty of Medicine, University of Manitoba, a B.Sc, (Med.) student researched the compound 2, 4-dimethoxyphenylethylamine and its levels in schizophrenic patients. This work was undertaken within the Biochemistry Department, B.M.H.

BRANDON HOSPITAL FOR MENTAL DISEASES

MOVEMENT OF PATIENTS

<u>Movement of Patient Population</u>	<u>M.</u>	<u>F.</u>	<u>T.</u>
Patients remaining in Hospital Dec. 31, 1967	528	482	1,010
Patients on Probation or otherwise absent as at December 31, 1967	51	45	96
Patients on Register as at December 31, 1967	579	527	1,106
Patients on Register as at December 31, 1966	646	586	1,232
On Probation or otherwise absent as at December 31, 1966	53	37	90
Remaining in Hospital as at December 31, 1966	593	549	1,142

<u>First Admissions</u>	<u>M.</u>	<u>F.</u>	<u>T.</u>
Non-Compulsory	71	80	151
Compulsory	88	86	174
Transfers	5	4	9
TOTAL	164	170	334

<u>Readmissions</u>			
Non-Compulsory	93	78	171
Compulsory	52	59	111
Transfers	3	6	9
TOTAL	148	143	291

Total Admissions	312	313	625
Total Under Treatment	958	899	1,857

<u>Separations</u>			
Discharges	335	342	677
Deaths	37	25	62
Transfers (to other Mental Hospitals)	7	5	12
Total Separations	379	372	751

	<u>1967</u>	<u>1966</u>	<u>1965</u>	<u>1964</u>	<u>1963</u>
1. Average Daily Patient Population	1,074	1,129	1,214	1,319	1,363
2. % Discharged of Total Admissions	110.2%	89.8%	99.8%	97.5%	90.6%
3. % Deaths of Total Under Treatment	3.3%	4.7%	9.59%	4.21%	7.8%
4. Change in Patient Population	-132	-15	-127	-55	-104

DISCHARGES 1967

DIAGNOSIS	<u>Time in Hospital</u>						TOTAL
	0-3 mos.	4-6 mos.	7-12 mos.	1-2 yrs.	2-5 yrs.	Over 5 yrs.	
Schizophrenia	114	51	29	12	8	35	249
Involucional Melancholia	11	3	-	1	-	-	15
Manic Depressive	26	6	5	3	-	-	40
Paranoid Condition	13	3	2	2	-	-	20
Senile Psychosis	13	3	1	-	-	-	17
Chronic Brain Syndrome	-	1	-	-	-	-	1
Anxiety Reaction	2	2	-	-	-	-	4
Alcoholic Psychosis	2	-	-	-	-	-	2
Other and Unspecified Psychosis	37	12	4	4	1	1	59
Psychoneurosis	64	6	1	-	-	1	72
Personality Disorder (Behaviour Disorders)	52	13	10	2	-	-	77
Alcoholism	46	10	6	1	-	-	63
Pathological Personality	7	-	1	1	-	-	9
Mental Defective	1	1	1	2	-	1	6
Epilepsy	14	3	3	1	-	1	22
Senility and Others	1	1	1	-	-	-	3
Neurotic Depressive Reaction	20	1	5	-	-	-	26
Drug Addiction	2	2	-	-	-	-	4
	425	118	69	29	9	39	689

COMPARISON HOSPITAL PSYCHIATRY STATISTICS

	<u>1967</u>	<u>1966</u>
Population December 31	1,010	1,142
Population-Pts. 16 & under		
1st Admissions	30	26
Population Dec. 31	11	15
Epileptics - Dec. 31	102	107
Admissions -		
First	334	331
Readmissions	<u>291</u>	<u>293</u>
Total	625	624
Separations -		
Discharges	677	548
Deaths	62	91
Transfers	<u>12</u>	<u>12</u>
Total	751	651
Part-Time Treatment -		
New Referrals for Day Care	82	92
No. of Different Day Care Pts. (Dec. 31)	103	93
Patient Days Day Care	11,142	13,790
New Referrals for Night Care	17	24
No. of Different Night Care Pts. (Dec. 31)	-	4
Patient Nights Night Care	706	429
Elopements	82	51
Insulin Therapy -		
New Cases Started	7	12
Total Treatments Given	78	449
E.C.T. -		
New Cases Started	259	233
Total Treatments Given	2,928	2,815

COMPARISON OF PSYCHIATRIC TEAM STATISTICS

(Comparable Figures for 1966 are in Parenthesis)

1967

	<u>Team I</u>	<u>Team II</u>	<u>Team III</u>	<u>Team IV</u>
Population December 31-				
Male	134(137)	129(148)	26(56)	239(252)
Female	121(143)	145(165)	104(124)	112(117)
Total	255(280)	274(313)	130(180)	351(369)
Admissions -				
Male First	45(59)	60(45)	50(50)	10(13)
Male Readmissions	63(51)	61(66)	40(37)	8(6)
Male Total	108(110)	121(111)	90(87)	18(19)
Female First	61(64)	57(57)	48(44)	1(9)
Female Readmissions	52(54)	53(69)	45(36)	9(6)
Female Total	113(118)	110(126)	93(80)	10(15)
Disposals -				
Male Probations	33(39)	35(24)	29(13)	2(7)
Male Discharges	81(66)	99(79)	77(53)	11(7)
Male Deaths	1(3)	1(-)	1(2)	32(55)
Male Total	115(108)	135(103)	107(68)	45(69)
Female Probations	30(32)	26(27)	27(11)	-(-)
Female Discharges	99(86)	100(86)	86(52)	1(8)
Female Deaths	-(1)	1(-)	1(-)	22(30)
Female Total	129(119)	127(113)	114(63)	23(38)
E.C.T. -				
Male New Cases Started	45(28)	45(57)	23(25)	1(-)
Male Total Trts. Given	549(377)	485(354)	333(430)	-(-)
Female New Cases Started	47(32)	54(65)	44(26)	1(-)
Female Total Trts. Given	495(726)	431(489)	633(439)	2(-)
Infirmery Transfers -				
Male In	38(52)	51(35)	36(27)	99(87)
Male Out	45(42)	43(31)	32(27)	86(69)
Female In	44(39)	44(79)	38(28)	31(39)
Female Out	41(37)	41(62)	33(24)	30(34)

MEDICAL STAFF OUT-PATIENT SERVICES

1. Number of patients seen who were not former in-patients:	917	
(a) New patients	446	
(b) Patients seen during previous year(s)	471	
(c) Total interviews of patients in (a) and (b)		2,565
2. Number of patients seen who were former in-patients:	1,069	
(a) New Patients	374	
(b) Patients seen during the previous year(s)	695	
(c) Total interviews of patients in (a) and (b)		3,467
3. Patients seen "away from" the hospital in Community Mental Health Clinics	144	
(a) New patients	61	
(b) Patients seen during previous year(s)	83	
(c) Total interviews of patients in (a) and (b)		261
4. Total number of patients under 1, 2 and 3	2,130	
Total number of interviews under 1, 2 and 3		6,293

Patients seen in Child Guidance Clinic (not included in above report):

1. Number of new C.G.C. patients	197	
2. Number of previous C.G.C. patients	192	
3. Number of visits of new C.G.C. patients	336	
4. Number of visits of previous C.G.C. patients	622	
5. Total number of C.G.C. patients	389	
6. Total number of C.G.C. interviews	958	

MEDICAL OUT-PATIENT SERVICES

				Child Guidance Clinic Team	Travelling Clinic	Total 1967	Total 1966
	I	II	III				
<u>Out-Patients</u>							
<u>1st Assessment</u>							
Children	-	-	-	109	88	197	189
Adults	200	87	42	117	61	507	472
	200	87	42	226	149	704	661
<u>After-Care Interviews</u>							
Children	-	-	-	568	208	776	839
Adults	2,203	2,126	207	823	305	5,664	5,764
	2,203	2,126	207	1,391	513	6,440	6,603
<u>Total Interviews</u>							
Children	-	-	-	677	296	973	1,028
Adults	2,403	2,213	249	940	366	6,171	6,236
	2,403	2,213	249	1,617	662	7,144	7,264
<u>Forensic Cases</u>							
<u>1st Contact Report</u>							
Children						4	-
Adults						20	19
Total						24	19
<u>After-Care</u>							
Children						2	2
Adults						44	43
Total						46	45
<u>Consultations Outside Hospital</u>							
<u>1st Contact</u>							
Children						-	-
Adults						33	38
Total						33	38
<u>After-Care</u>							
Children						76	126
Adults						14	26
Total						90	152

CLINICAL PSYCHOLOGISTS STATISTICS

	<u>1967</u>	<u>1966</u>
<u>Patients Seen -</u>		
In-Patients		
Children	7	-
Adults	275	156
Out-Patients		
Children	1,595	1,525
Adults	229	341
Total No. of Different Patients Seen (In-Patients and Out-Patients- Children and Adults)	2,106	2,022
<u>Interviews -</u>		
No. of Testing Interviews	1,714	-
No. of Counselling Interviews with Patients	454	-
No. of Counselling Interviews with Others	1,400	-
Total No. of Interviews	3,568	-
<u>Tests (Number Given) -</u>		
Measurement Tests: I.Q., Aptitude, etc.	2,704	2,096
Projective Tests	2,473	2,233
Other Tests	2,633	1,991
Total No. of Tests	7,810	6,320
<u>Sources of Referral -</u>		
Physician	493	
School Authorities	1,066	
Children's Aid	123	
Other Sources	424	
Total Referrals	2,106	

SOCIAL SERVICE STATISTICS

	Total In-Pts.	Out-Pts. Children	Adults	Total Out-Pts.	Grand Total 1967	Grand Total 1966
New Referrals	624	70	387	457	1,081	1,224
Interviews	4,042	726	6,900	7,626	11,668	8,367
Visits	838	91	2,568	2,659	3,497	1,876
Social Histories	472	46	229	275	747	926

Rehabilitation:

Placements:

Rehab. Industries	40
Foster Homes	126

Foster Home Patients as of December 31, 1967: 225

Winnipeg Placements: 226
(as of Dec. 31/67)

PHARMACY

Out-Patient Prescriptions:

	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	
Annual Total	9,830	15,494	17,957	19,856	25,351	- Total \$74,880.

The average prescription cost approximately \$3.36.

ACTIVITY THERAPY STATISTICS

<u>Occupational Therapy -</u>	<u>1967</u>	<u>1966</u>
New	429	486
Out-Patient Services	46	59
Total In-Pts. in O.T. at end of year	348	403
Out-Pts. in O.T. at end of year	22	69
Total In-Pts. Attending O.T.during year	787	831
Total Out-Pts.Attending O.T.during year	111	128
 <u>Industrial Therapy -</u>		
New	204	396
Out-Patient Services	7	27
Total In-Pts. in I.T. at end of year	149	166
Out-Patients in I.T. at end of year	8	8
Total In-Pts.attending I.T. during year	350	502
Total Out-Pts. attending I.T. during year	12	37
 <u>Employment in Hospital -</u>		
On Industrial Therapy Payroll	240	250
Hospital Pts. Payroll -		
On Payroll	222	280
Pts. Eligible but not on	19	21
 <u>Hospital Pts. Employed Outside Hospital</u>	 11	 10

LABORATORY DEPARTMENT

Statistics:

<u>Department</u>	<u>Examinations</u>	<u>Units</u>
Hematology	19,600	42,556
Urinalysis	5,545	8,060
Serology, Miscellaneous	9,048	23,207
Biochemistry	15,699	59,407
Diagnostic Bacteriology	46,544	78,705
Sanitary Bacteriology	31,151	43,372
Histo-Pathology	16,538	20,076
Autopsies	9,019	14,657
TOTAL	153,144	290,040

Total Examinations and Units of Work were slightly down from 1966.

654 E.C.G.'s were done.

129 Autopsies were performed, 104 being complete.

44 Autopsies were performed in the hospital, which represents 74% of total deaths of 62.

BIOCHEMISTRY DEPARTMENT

Statistics:

Some 3,232 biochemical tests, involving some 22,716 units of work, were done during the year.

The following is a detailed analysis of the first nine months' operation:

Percentage Distribution of Biochemistry Work Done for the following centres:

Government Laboratories (B MH, Lab. & X-ray)	68.8%
Others (Assiniboine Hospital, Clinic, etc.)	31.2%

Biochemical tests done:

	<u>No.</u>	<u>Units/Test</u>	<u>Total Units</u>
Alcohol	152	6	912
Aldolase	14	6	84
Amino Acids	4	4	16
Barb.	134	4	536
Catechol.	49	12	588
Calculi	13	5	65
Carotene	44	3	132
CO	8	6	48
Cholesterol	1	2	2
Ch'ase	6	4	24
Copper	18	5	60
CPK	9	6	54
Cystine			
Elect.	381	6	2,286
Fibrinogen	27	4	108
Hb.	7	1	7
MetHb.	2	6	12
5HIAA	20	10	200
Lipids	35	10	350
Mg.	86	5	430
Neuraminic Acid	17	7	119
17-KS	125	15	1,875
17-OHCS	132	10	1,320
17-KGS	23	15	345
Aldosterone	1	4	4
Phenoth.	78	2	156
Phenylalanine	39	6	234
Porphy.	56	4	224
Pyruvate	8	7	56
Ribo.	3	3	9
Salicylates	42	4	168
Serotonin	49	6	294
Iron	357	6	2,142
UIBC	170	10	1,700
TIBC	170	10	1,700
Sulfates	4	3	12
VMA	44	8	352
Sulfanil	1	2	2
Homogentisic	1	4	4
pH	4	2	8
Lead	4	6	24
Copper Oxidase	9	4	36
Lactate	1	6	6
Figlu	5	4	20
SGO T	75	4	300
Mercury	2	6	12
	<u>2,424</u>		<u>17,036</u>

DEPARTMENT OF RADIOLOGY

The following is a detailed report of work done during the year:

Chest	2,449
Ribs & Sternum	17
Shoulder and Clavicle	29
Extremities	247
Cervical Spine	21
Dorsal Spine	177
Lumbo-Sacral Spine	62
Pelvis-Hip	70
Skull	153
Sinuses and Mastoids	6
Nasal & Facial Bones, Jaw	22
Kub & Abdomen	86
I.V.P.	20
G.B. Viz.	7
Barium Meal	93
Barium Enema	24
Miscellaneous	1
Total Examinations	3,484

Comparative Figures for the past five years:

	<u>1967</u>	<u>1966</u>	<u>1965</u>	<u>1964</u>	<u>1963</u>
Total Examinations	3,484	2,609	4,394	2,466	2,446
Total Films	6,453	5,670	7,629	5,382	5,028

FRACTURES	Male	Female	Total
Metacarpal	3	2	5
Toe-Metatarsal	1	3	4
Radius & Ulna	-	5	5
Malleolus	-	2	2
Humerus	1	2	2
Clavicle	1	1	2
Femur-Hip	1	12	13
Pelvis	-	1	1
Ribs	-	1	1
Skull	1	-	1
Nasal	2	2	4
	<u>9</u>	<u>31</u>	<u>40</u>

(Staff - 2)

Comparative Figures for the past five years:

	<u>1967</u>	<u>1966</u>	<u>1965</u>	<u>1964</u>	<u>1963</u>
Total Number of Fractures:	40	59	67	57	53

TRAINING SCHOOL

<u>Year</u>	<u>Number Enrolled</u>	<u>Number at Grad. Date</u>	<u>Total No.in School on Enrolment Date</u>	<u>Total No. in School Dec. 31, 1967</u>
-------------	----------------------------	---------------------------------	---	--

A. Licensed Practical & Psychiatric Nurses - 3 Years:

1958-1961	16	6	22	
1959-1962	10	5	22	
1960-1963	24	8	37	
1961-1964	24	16	42	39 (1961)
1962-1965	22	13	53	50 (1962)
1963-1966	22	17	55	53 (1963)
1964-1967	24	13	54	48 (1964)
1965-1968	25	-	54	49 (1965)
1966-1969	23	-	51	47 (1966)
1967-1970	28	-	53	43 (1967)

B. Male Psychiatric Nurses - 3 Years:

1958-1961	17	8	23	
1959-1962	23	12	38	
1960-1963	26	15	48	
1961-1964	16	13	49	
1962-1965	9	8	40	
1963-1966	12	7	36	34 (1963)
1964-1967	16	7	33	31 (1964)
1965-1968	11	-	27	26 (1965)
1966-1969	11	-	26	25 (1966)
1967-1970	7	-	21	17

C. Post-Graduate Psychiatric Nursing Course - 6 months:

1958-1959	6	6
1959-1960	14	12
1960-1961	11	10

SELKIRK HOSPITAL FOR MENTAL DISEASES

The Selkirk Hospital for Mental Diseases provides direct services to approximately 80,000 persons and final treatment services to approximately two-thirds of the population of Manitoba.

Activities of this hospital during 1967 may be usefully discussed under the following headings:

Acute Treatment Services

The term acute refers to persons who have recently (during the past year or so) become mentally disordered and mental disorder covers neuroses, psychoses, personality disorders or in short, any psychiatric illness. The hospital's Acute Treatment Services are provided by two units: the Reception Unit and the Selkirk Psychiatric Institute with a combined bed capacity of 244. All patients with the exception of those suffering from psychoses of the elderly or chronic forms of mental illness, are housed in these two units. In either area there are facilities for proven therapies such as pharmacotherapy, electrical treatments, individual and group psychotherapy, occupational therapy, to name only a few. All acute patients go initially to the Reception Unit where they are screened.

In 1966 the total of admissions and readmissions was 606. This year the total is 825, a rise of nearly 27 percent. This disproportionate increase (the highest in any one year in the experience of the hospital), caused a heavy strain on the physicians and supporting staff working in the acute treatment units. The average length of stay in hospital was not appreciably altered.

Chronic Treatment Services

The term chronic refers to patients who have been continuously hospitalized for two or more consecutive years. In this hospital there

are approximately 250 patients in this category. To assist recovery and to reduce the harmful effects of long-term hospitalization, an active rehabilitation program for these patients has been developed.

The chronic treatment program is based on a continuing assessment of patients with respect to their activities throughout various levels of performance. Objectives are to return chronic patients to their ~~maximum~~ potential and discharge them back into the community. The program is complex and geared to meet the specific needs of respective patients. That it is successful, there can be no doubt. During the period 1960 to 1967 the population of the hospital has been reduced by more than 400. What makes this figure even more significant is that during this same seven-year period, the admission rate to the hospital has more than doubled.

Infirmatory Services

This area has a total of 300 beds. As on the chronic wards, efforts are directed to return as many senile psychotic patients as possible to their maximum potential. Approximately 25 percent of these patients are able to return to the community.

Out-Patient Services

The Out-Patient Department provides specialized follow-up help to all cases that require it. The program can best be described as one that is hospital-based as distinct from programs in the other centres where the patient is referred to a series of agencies. Before a patient leaves hospital, assistance is available from a number of agencies such as Canada Manpower, Skills Unlimited and Rehabilitation Services. These agencies meet with hospital staff and develop plans which are tailor-made to fit the needs of the patient. The patient's treating physician remains as the person responsible for developing and

co-ordinating this plan. This approach where the treating physician remains in charge has worked well to date. Experience has also shown that without active follow-up services, many patients would soon return to hospital because of failure to take medications, difficulties in adjustment in the community and other problems.

Community Services

Community psychiatric services are provided by three hospital medical staff supported by psychologists, social workers and other resources. Here, staff members meet with general practitioners and discuss their patients' psychiatric problems. This enables the general practitioner not only to obtain a consultation about a difficult and challenging case, but also provides a valuable teaching experience to him.

At present community clinics have been established in the towns of Selkirk, Beausejour, Gimli, Stonewall and Pinawa. The general practitioners without exception value this service highly.

Professional Services

The statistical report gives details of various activities. A few examples may indicate the work load that is presently performed:

- a) an admission rate over two patients per day.
- b) a discharge rate of approximately 95 percent.

- c) an average patient population of 799.
- d) over 2,000 patients on follow-up treatment.
- e) nearly 9,000 test procedures by Psychology.
- f) over 2,200 patients in active social service files.
- g) 231 patients in foster homes.
- h) social histories on 2,543 in-patients and on 8,181 out-patients.

Teaching and Educational Activities

The hospital may be considered a major teaching institution in the psychiatric (and related) fields, and actively participates in a wide range of programs such as:

1. The hospital is integrated with the Postgraduate Program of The University of Manitoba for the educational training of Psychiatric Residents leading to the Diploma of The University of Manitoba and qualification to write the examinations for Specialty with the Royal College of Physicians and Surgeons (Canada).
2. One-day clinical programs are arranged for each Fourth Year Medical Student of The University of Manitoba (in groups of six to eight).
3. A three-year course for the graduation of psychiatric nurses, under the Educational Advisory Committee. It is planned to inaugurate a two-year course in the fall of 1968.
4. Affiliation for Registered Nurse students from Grace and St. Boniface Hospitals.
5. Orientation courses for Public Health Nurses, Indian Health Nurses and Victorian Order Nurses.
6. Internships for students from the School of Occupational Therapy, The University of Manitoba.
7. Field Placement for a unit of the School of Social Work, The University of Manitoba; and lectures and demonstrations to the

program of the school.

8. Various lectures for students in Theology, Pharmacy, Psychology, etc.

Research

The Selkirk Mental Hospital is actively engaged in research and has just completed a clinical trial on a depot phenothiazine in Schizophrenic patients. An article on this will be published in the February, 1968, issue of the journal "Diseases of the Nervous System". In addition to clinical trials on drugs, a Committee is carrying out research on behaviour therapy and its application to selected patients that have remained refractory to other therapies.

Statistical Summary

Admissions

Total admissions in 1967 numbered 825 - in 1966 (606), and in 1965 (630).

Non-compulsory admissions (voluntary) totalled 420 patients (51 percent). In 1966 (56 percent), and in 1965 (52 percent).

The 825 admissions were composed of 397 males and 428 females. There is no significant difference in the proportions from previous years.

Interpretation

Two reasons for the significant increase of admissions (27 percent) during 1967 may be:

(1) The community clinics have greatly expanded their operations during 1967 and this expansion has provided services to many not previously offered, hence a rise in admissions. This is in keeping with modern trends in psychiatry as it is to be expected that more can be done for a psychiatric disability if treated earlier.

(2) This hospital continues as it has in the past to accept all persons who have a legitimate reason for using specialized services. No barriers are placed in the way of self-referrals from physicians, agencies, etc. This service has increased significantly during the past year and accounts, in part, for increased admissions.

Separations

A total of 778 persons were separated from the hospital, made up as follows:

Discharges	- 681
Deaths	- 68
Transfers to other mental hospitals-	<u>29</u>
	<u>778</u>

Interpretation

Separations in 1967 equal 82 percent of our total admissions. In 1966 the percentage was 94 percent. On first glance this would appear to indicate that once again the hospital is beginning to accumulate patients as it did ten years ago. However, although the percentage separated in 1967 is less than in 1966, only 664 patients were separated from hospital in 1966 whereas in 1967, 778 patients were separated. It follows that although the percentage separation is 12 percent less for 1967, separations in 1967 totalled 114 more patients than in 1966. Further, because of the disproportionate number of admissions in 1967 (an increase of 27 percent), it will take the staff a few months to handle the backlog of patients destined to leave hospital in the near future.

Hospital Stay

The average number of patients in residence in 1967 was 799.9, an increase of 30 over the preceding year. Here again this

increase is attributed to the soaring admission rate.

Treatment Procedures

During 1967 there were 2,510 electric convulsive therapy treatments given to 272 patients. Approximately 90 percent of all patients are on either ataractics or anti-depressant medications. In addition to the above drugs, more than 50 percent of patients in the infirmary unit are on medicinal therapy for medical and physical conditions and disabilities. All patients see their treating physicians at regular intervals for psychotherapy and group therapy if indicated.

Psychology

This department saw a total of 547 patients in 1967 made up as follows: in-patients 367; out-patients 52; and child guidance cases 128.

This department administered 8,057 tests, gave 288 hours of group psychotherapy and was involved in testing for a total of 50 hours.

With regard to research, it engaged itself in 24 projects involving 608 patients. This required 907 hours of time for psychologists.

Nursing

Selkirk's nursing staff continues to give effective service in the many aspects of patient care and treatment. At present there are 48 students in the hospital School of Nursing. Over the year 19 Nurses graduated.

Graduates from Selkirk are recognized nationally and internationally and are in great demand. Consequently many leave Manitoba for a variety of reasons, chiefly financial. At present there is concern over the fact that 70 of the incumbents in positions requiring a psychiatric nurse are unqualified. Nevertheless, the nursing

department provided excellent service over the year despite these difficulties.

Social Service:

This department serviced a total of 10,724 cases in 1967 made up as follows:

In-patients	- 2,543
Out-patients (urban)	- 5,770
Out-patients (rural)	- 2,411

This was accomplished with a field staff of 14. The average monthly case load per worker was 63 cases.

Laboratory

Laboratory staff carried out 2,774 X-rays, 329 electrocardiograms and 405 electroencephalograms.

Dental

The hospital dentist saw 753 patients with resultant provision of treatment, dentures, etc.

Rehabilitation Services

This service conducts an active program for 210 patients on chronic wards and 130 patients in the infirmary unit. The service has also been extended to the acute-treatment areas.

The industrial workshop, Skills Unlimited, Selkirk, has again proven to be a most valuable resource. A total of 300 patients attended during the year for work assessment and work training.

SELKIRK HOSPITAL FOR MENTAL DISEASES

1. <u>Movement of Patient Population</u>	<u>M.</u>	<u>F.</u>	<u>T.</u>	<u>Previous Year Total</u>
On Register as at December 31st, 1966	456	421	877	935
On Probation as at December 31st 1966	58	40	98	116
Remaining in Hospital as at December 31st, 1966	398	381	779	819
<u>First Admissions: -</u>				
	<u>M.</u>	<u>F.</u>	<u>T.</u>	
Non-Compulsory	40	51	91	
Compulsory (General)	20	14	34	
Transfers	<u>39</u>	<u>63</u>	<u>102</u>	
Total	99	128	227	
<u>Readmissions: -</u>				
Non-Compulsory	162	167	329	
Compulsory (General)	61	67	128	
Transfers	<u>75</u>	<u>66</u>	<u>141</u>	
Total	298	300	598	
Total Admissions	397	428	825	
Total Under Treatment	853	849	1702	
<u>Separations: -</u>				
Discharges	338	343	681	
Deaths	34	34	68	
Transfers out	15	14	29	
Total Separations	387	391	778	
Patients Remaining in Hospital December 31, 1967	408	393	801	
Patients on Probation as at December 31, 1967	58	65	123	
Patients on Register as at December 31, 1967	466	458	924	

2. Additional Data

	<u>1967</u>	<u>1966</u>	<u>1965</u>	<u>1964</u>	<u>1963</u>
1. Average Daily Patient Population	799.96	769.71	869.23	923.36	1010.25
2. Change in Patient Population	+22	-40	-76	-66	-94
3. % Discharged of Total Admissions	82.42	94.72	100.95	102.98	93.10
4. % Deaths of Total Under Treatment	3.99	4.86	4.01	3.62	5.56

(b) Staff - as at December 31st 1967

<u>Department</u>	<u>No. of Established Positions</u>	<u>No. of Positions Occupied</u>
Medical	20	19
Nursing - Male)) -Female)	338	343
Occupational Therapy	19	18
Social Work	20	19
Psychology	6	5
Clerical and Administration	35	34
Other Staff	7	7
Dietary and Housekeeping	105	102
Laundry	30	30
Medical Technicians	4	4
Farm	16	16
	600	597

(c) Out Patient Department

1.	Number of patients seen who were not former in-patients	65	
	(a) New patients	12	
	(b) Patients seen during the previous year(s)	53	
	(c) Total interciews of patients in a) and b)		291
2.	Number of patients seen who were former in-patients	1,486	
	(a) New Patients	194	
	(b) Patients seen during the previous year(s)	1,292	
	(c) Total interviews of patients in a) and b)		6,153
3.	Patients seen "away from" the hospital in Community Mental Health Clinics	619	
	(a) New patients	318	
	(b) Patients seen during the previous year(s)	301	
	(c) Total interviews of patients in a) and b)	_____	<u>3,733</u>
4.	Total number of patients under 1, 2 and 3	2,170	
	Total number of interviews under 1, 2 and 3		10,177

Patients seen in Child Guidance Clinic (not included in above report):

1.	Number of new C.G.C. patients	17	
2.	Number of previous C.G.C. patients	10	
3.	Number of visits of new C.G.C. patients		43
4.	Number of visits of patients, previous C.G.C.	___	<u>38</u>
5.	Total number of C.G.C. patients	27	
6.	Total number of C.G.C. interviews		81

THE MANITOBA SCHOOL FOR RETARDATE

The Manitoba School for Retardates at Portage la Prairie provides residential care for approximately 1,150 retardates. All degrees of retardation are included in the institution, ranging from mildly retarded through the moderately retarded and severely retarded to the profoundly retarded.

During 1967 progress has been recorded in several important areas of institutional programming.

1. The rehabilitation program continued to expand steadily during 1967, and a total of 117 discharges was achieved during the year. This reflects a heavier case-load on the five-member Social Service Department. This department now covers nearly the complete province except for the extreme northern areas, and even there a number of placements have been made in Thompson. A proportion of cases dealt with by the Department are handled by the Division of Rehabilitation Services, but an even larger proportion are rehabilitated directly to the community by the Social Service Department of the Manitoba School.

2. The Vocational Training Program recorded further growth this year, both within and outside the institution. There has been a steady increase in the number of local work placements in Portage la Prairie over the year, and this speaks highly of the cooperative and helpful attitude of the businessmen of the city, who have made available work training placements in large numbers for our residents.

3. The summer of 1967 saw the introduction of Reinforcement Therapy as a routine training procedure for retardates and for autistic children. These programs of training will be incorporated

in the routine nursing education courses provided at the Manitoba School, and, as time goes by, should form the basis of useful programming for severely and moderately retarded children and adults. Some very satisfactory results have been achieved in the education of a group of autistic children at the Manitoba School, and this program is continuing with the assistance of students from the Department of Psychology of St. Paul's College, who are coming out to the Manitoba School each day to continue the training classes for autistic children.

4. Remotivation -- or more properly motivation -- programs have also been instituted on the residential areas of the Manitoba School over the course of the past year. This program is carried out by nursing staff, under the guidance of a member of the Nursing Education staff and with the general assistance of the Psychology staff of the School. Here again the introduction of an established methodology of behavioral modification has produced effective results, and the program will be continued as a routine method of training at the Manitoba School.

5. A research project into the problem of Developmental Dyslexia was completed this fall at the Manitoba School. Supported by a Mental Health grant from the Department of Health and Welfare in Ottawa this project was carried out by a team of researchers under the general administration of the Medical Superintendent and the results will be published in the near future.

6. Progress was continued during the year in the process of dividing the institution up into functional units based on a more effective segregation of the population into the various degrees of retardation. One unit was used to concentrate most cases requiring considerable medical and psychiatric nursing supervision, leaving

the remaining buildings largely devoted to the problems of moderate and mild mental retardation. This process will be continued until the institution is effectively divided into units serving the various grades of retardation.

7. Two new cottages for female residents were completed and should be operational in 1968.

8. The Out-Patient Department continued to expand over the year, and travelling clinics, largely serving the needs of school children with learning problems, were extended into the south-central Manitoba area. Assessment clinics were continued in the northern areas of the Province, servicing Snow Lake, Churchill, Thompson, and Flin Flon.

9. The Auxilliary Committee to the Manitoba School, established in 1966, has been active during the year and co-sponsored with the institution a second Open House. This open house was extremely successful and funds collected will be used to assist in various projects around the institution. Also, efforts by the auxilliary in fostering good relations between the school and the community have been successful.

10. The first community residence for moderately retarded adults was officially opened in 1967 in Portage, by the Minister of Health. Results to date in the operation of this residence have been entirely favorable, and it is hoped to interest other communities in Manitoba in the development of similar facilities. The co-operation of the Department of Welfare in establishing this, and other programs of community placement is gratefully acknowledged.

11. A new park has been established in the south-west corner of the institution grounds and will be developed further as a Manitoba Centennial project over the next two years.

THE MANITOBA SCHOOL FOR RETARDATE

MOVEMENT OF PATIENT POPULATION

	<u>MALE</u>	<u>FEMALE</u>	<u>TOTAL</u>
Remaining under Treatment December 31st			
1966	604	536	1,140
First Admissions	85	64	149
Re-Admissions	4	2	6
Discharges	60	57	117
Deaths	9	5	14
Remaining under Treatment December 31st			
1967	624	540	1,164
Environmental situation: (155 admissions and readmissions)			Urban 103
			Rural 52
Marital Status	155 Single		
Nativity	155 Canadian		
Ages:	6 and under - 12;	7 to 10 - 33;	11 to 19 - 72;
	20 to 29 - 19;	30 to 39 - 8;	40 to 49 - 6;
	50 and over - 5.		

Deaths totalled - 14; 9 Male, 5 Female.

Causes on file.

VOCATIONAL REHABILITATION DRAFT

	<u>1966</u>	<u>1967</u>
Work Training Placements	75	68
Work Training Probations	21	26
Social Allowances Unemployable Probations	7	10
Work Assessments (Skills Unlimited)	31	38
Work Discharges	30	42
Social Allowances Unemployable Discharges	10	37
New Cases 1967		269

Vocational Training (Institutional)

Number of residents on Vocational Training or Occupations	157
Groups attending the School for special lectures in the operation and objectives of the School	43
Total number of students	615
Others	160
Total	785

Travelling Assessment Clinics

<u>Areas Served</u>	<u>Clinics Held</u>
Flin Flon	3
Churchill	1
Thompson	1
Snow Lake	1
McGregor	1
Austin	1
Total O.P. at Manitoba School	110
Total O.P. at Travelling Clinic	<u>190</u>
Total	300

CHILD GUIDANCE CLINIC OF GREATER WINNIPEG

The Child Guidance Clinic has continued to provide a comprehensive mental health service for school children in Metropolitan Winnipeg through its five clinical departments (Psychiatry, School Psychology, School Social Work, Clinical Reading, Speech and Hearing). For statistical purposes the Clinic year began July 1, 1966 and ended June 30, 1967.

As of September 1966 there was an establishment for a professional staff of 96 persons. Twenty of these were paid with money derived from Federal Mental Health Grants and a direct grant from the Provincial Department of Health. The Assistant Director is seconded to the Clinic by the Department of Education. These twenty-one persons provided the central administration, the consultant and supervisory functions for the field workers, the psychiatric services and other services which cannot be financed by school board funds.

Field workers in psychology, social work, reading and speech and hearing were engaged by the Clinic to work in local school divisions and these local areas paid their salaries and expenses. Eleven school divisions in the metropolitan area budgeted for 76 staff members with 70 actually on staff as of June, 1967. Two School of Social Work supervisors and 13 first and second year students were attached to the Clinic for field work experience. The financial contributions from Mental Health Grants and the Department of Health made possible the employment of a clinic secretary and three clerks. Eight clerks were supported by the Winnipeg Division and one from funds contributed by suburban school areas. Thus a total of 119 persons were working out of the Clinic during the school year 1966 - 1967.

The Winnipeg School Division No. 1 acted as an accounting and administrative agency. Any child attending public, private or parochial school was eligible for referral. No direct charge of any kind was made for services rendered. The child could receive service from any of the five Clinic departments either singly or working together in whatever combination was indicated by the child's particular problems. Referrals were made by parents, school staff, agency personnel, physicians, nurses and other professional persons. Self-referrals were accepted from older children.

According to a count taken from the Central Reference Index for the year 1966-67, 4016 new registrations were added and 4475 children who had previously been registered were contacted again during the year.

A "Blue Manual" briefly outlining the service and a detailed Annual Report are available upon request.

Table I in the statistical appendix indicates the actual establishment for the 1966-67 staff, and the recommended establishment for each area served by the Clinic.

Table II indicates the number of children seen by each department during the 1966-67 year.

TABLE I

CHILD GUIDANCE CLINIC OF GREATER WINNIPEG
CLINIC STAFF AND SCHOOL POPULATION 1966 - 1967

	PSYCHIATRY		SCHOOL SOCIAL WORK		SCHOOL PSYCHOLOGY		SPEECH & HEARING		CLINICAL READING					POPULATION (JAN. 1/67)
	Estab.	Staff	Estab.	Staff	Estab.	Staff	Estab.	Staff	Estab. Cl.	Clinical Staff	Rec. Estab. Cl.	Rem. Rdg. Teachers	Rec. Estab. R.R.T.	
PROVINCIAL	8	4	4	4	4	3	2	2	2	2	3.0			
WINNIPEG			19	19	8	8.5	9	9	8	7	10.2	9.5	20.3	50,736
ASSINIBOINE NORTH			2	2	1	1	1		1	1	1.2		2.4	5,958
ASSINIBOINE SOUTH					.5	.5					.6	1	1.2	2,990
FORT GARRY				1	.5	.5					1.1		2.2	5,490
NORWOOD					.5	.5	.5	.25			.6		1.3	3,284
RIVER EAST			2.5	2.5	1.5	1.5	1.5	.75	.5		2.2	7	4.5	11,233
ST. BONIFACE			2	2	1	1	1				1.5	2	3.0	7,493
ST. JAMES			3	3	1	1	1	1	.5	.5	2.1		4.1	10,396
ST. VITAL			1	1	1	1	.5	.25			1.5	1	3.0	7,124
SEVEN OAKS			.5	.5	1.5	1	1	.75	.5		1.3	1	2.7	6,763
TRANSCOMA			1	1	1	1	.5	.5			1.4		2.8	6,986
SPRINGFIELD														
TOTALS	8	4	25	36	21.5	20.5	18	14.5	12.5	10.5	27	21.5	54	118,453

Estab. -- establishment
Estab. Cl. -- establishment of clinicians
Rem. Rdg. Teachers -- remedial reading teachers

CHILD GUIDANCE CLINIC OF GREATER WINNIPEG

The following table indicates the number of children seen by each department during the 1966-67 year. It also shows the number of cases who had previously had contact with the service.

TABLE NO. 2 - NUMBER OF CASES

	Psychiatry		S. S. W.		Psychology		S & H		Reading	
	Known	New	Known	New	Known	New	Known	New	Known	New
Winnipeg	55	99	1627	2025	228	1058	762	608	457	585
North Assiniboine	1	3	19	80	6	136	4	43	11	17
South Assiniboine	1	0	0	0	3	71	17	16		
Fort Garry	8	11	54	80	12	46	8	24		
Norwood	0	0	0	0	13	46	41	18		
River East	7	7	91	167	47	168	218	134		
St. Boniface	6	10	90	122	20	150	123	45		
St. Vital	6	5	45	91	18	109	32	60		
Seven Oaks	11	13	38	28	33	125	94	62		
Transcona- Springfield	9	2	112	60	30	85	69	45		
St. James	11	12	127	139	36	112	234	119	17	14
Totals	115	162	2203	2792	446	2106	1602	1174	485	616

FARM MANAGEMENT

Three institutional farms comprising over 4,500 acres are operated as part of the Hospitals for Mental Diseases at both Brandon and Selkirk and at the Manitoba School for Retardates at Portage la Prairie.

A large portion of some of the food products required by the institution are grown on these farms and surplus foods are sold in the general market.

Major products produced on institutional farms include field crops, vegetables, milk and pork.

FARMS' MANAGEMENT

Land Use and Field Crops and Gardens

Total Farm Acreages -

	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>TOTALS</u>
Field Crops	506	448	287	1241.
Hay and Pasture	1215	669	288.28	2172.28
Potatoes and Vegetables	74	45	68	187.
Hospital Grounds, parks roads, etc.	245	195.89	132	572.89
Total Farm Acreages -	2040	1357.89	775.28	4173.17

Rented land - Brandon 160 acres included

Macdonald Airport land - field crops, hay around runways 200 Acres.

Grain and Forage Crops - 1967

Oats - bus.	8600	20060	12760	41420
Barley - bus.	2070	-	-	2070
Ensilage - ton	280	225	186	691
Hay - bales	13365	15960	18000	47325
Green Food - ton	-	30	-	30
Sween Clover - ton	86	-	-	86
Straw - bales	14000	9000	4000	27000

	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>Totals</u>
<u>Staple Vegetables supplied to the Institutions -</u>				
Beets - lbs.	-	4656	17090	21746
Cabbage - lbs	28068	5036	24970	58074
Carrots - lbs.	-	11297	29500	40797
Onions - lbs.	5405	7489	12430	25324
Turnips - lbs.	8824	1865	33440	44129
Potatoes - bus.	3462	2220	5059	10741
<u>Returns from</u>				
SALE OF VEGETABLES	---	---	\$20.00	\$20.00

Livestock Production, Sales and Inventory

Cattle and Milk Producti n

Returns from				
Sale of Cattle -	\$17,902.21	11,247.20	5,579.25	\$34,728.66
Milk and Cream				
to Institution, lbs.	1,226,400	978,966	760,379	2,965,745
Milk fed to Stock -	201,250	27,907.5	81,558	310,715.5
Total Production -	1,427,650	1,006,873.5	841,937	3,276,460.5

INVENTORY - Dec. 31 - 67

Number of head				
on hand	240	185	176	601
Inventory Value	\$53,760.00	\$41,150.00	\$36,989.00	\$131,899.00

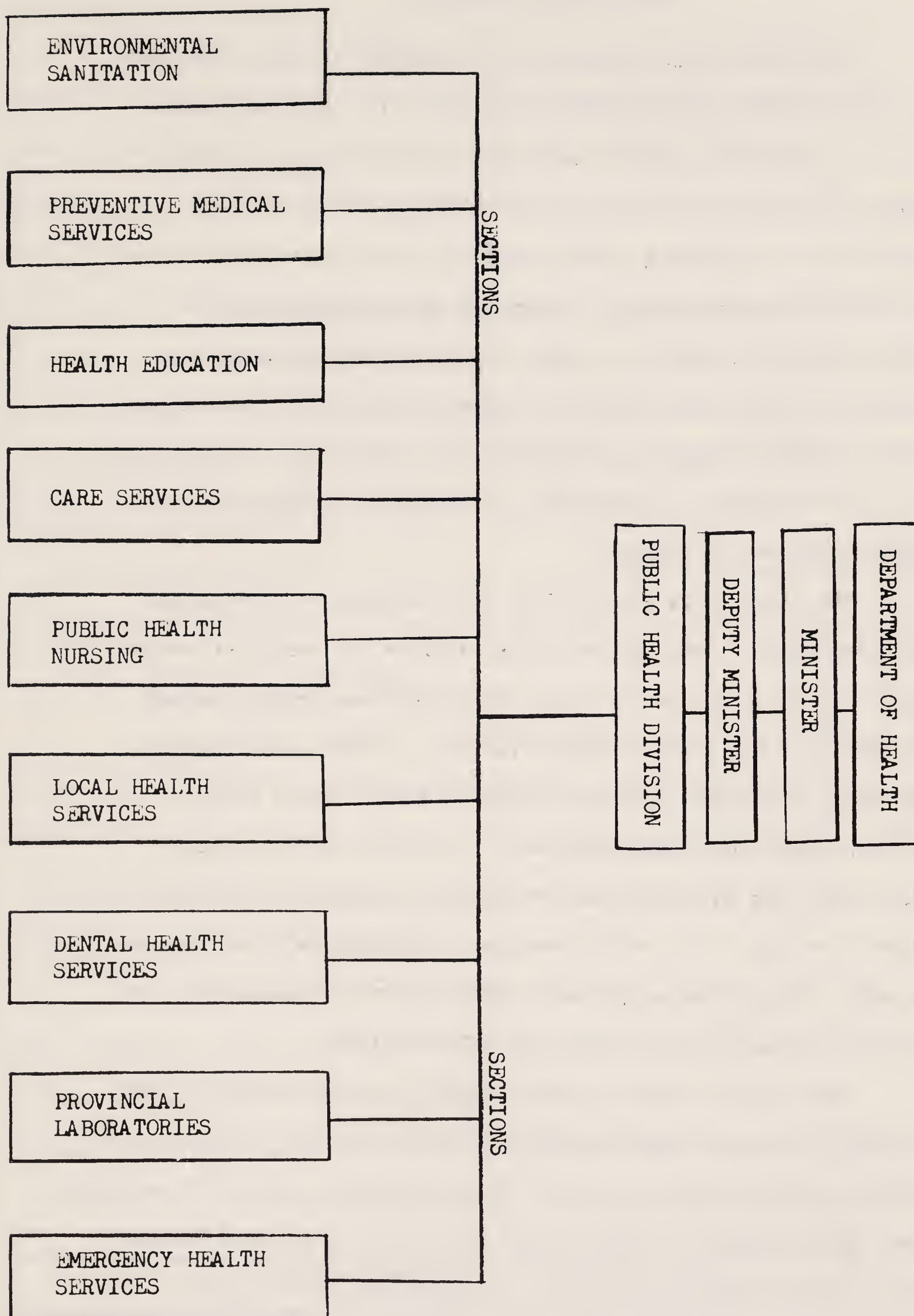
Hog and Pork Production, Sales and Inventory

Returns from				
Sale of Hogs	\$921.02	86,536.72	--	\$7,457.74
Pork supplied to				
Institution - lbs.	62,405	26,219	--	88,624

	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>Totals</u>
<u>Inventory - Dec. 31-67</u>				
No. of Hogs on hand	243	180	---	423
Inventory Value	\$8,775.00	\$6,870.00	---	\$15,645.00
<hr/>				
<u>TOTAL FARM INVENTORIES - Dec. 31-67</u>				
Grain and Feed	\$ 7,335.50	\$25,115.75	\$12,022.50	\$44,473.75
Vegetables	4,619.44	1,054.78	3,212.00	8,886.22
Livestock	62,535.00	48,020.00	36,989.00	147,544.00
Machinery, etc.	44,291.00	39,807.00	25,725.42	109,823.42
	<hr/>	<hr/>	<hr/>	<hr/>
	\$118,780.94	113,997.53	77,948.92	\$310,727.39
<hr/>				

Inventory values show livestock and produce
below sale values, and hay and grain at local
prices.

PUBLIC HEALTH DIVISION



PUBLIC HEALTH DIVISION

The Public Health Division is responsible for the provision of all public health services offered by the health department other than those given by the Mental Health and Rehabilitation Divisions, throughout the entire province with the exception of the City of Winnipeg. Even in Winnipeg, Care Services, jointly responsible to the Health and Welfare Departments, supervises care facilities and the placement of welfare patients. Also, where treatment services are unavailable for any reason owing to expense, complexity or geography, the Public Health Division is responsible for attempting to provide them either directly through its employees or indirectly through grants or any other means at its disposal.

The Division is divided into nine sections as shown in the organization chart. Most public health services and resources are made available to the public by the Local Health Services Section through Health Units and the Northern Health Services. These field services are provided by Medical Officers of Health, Public Health Nurses, Health Inspectors and Health Educators. At present public health services cover the major part of the province and plans are underway to extend coverage to the entire province. In addition Laboratory and X-Ray units form part of many Health Units to provide diagnostic services to the medical profession in rural Manitoba.

Each of the remaining eight sections provide support to the Local Health Services including Northern Health Services, and also have important responsibilities of their own in connection with their particular fields. These include: Environmental Sanitation; Preventive Medical Services; Health Education Services; Care Services; Public Health Nursing Services; Dental Health Services; Provincial Laboratory Services and Emergency Health Services. Their activities are described in the Sectional Reports.

LOCAL HEALTH SERVICES

The Local Health Services section of the Public Health Division is responsible for the provision of most public health services to the public. This is accomplished throughout Manitoba (exclusive of the City of Winnipeg) through a network of 15 Local Health Units and Northern Health Services. These health units essentially serve as the "Department of Health" in the community and are supported by all the administrative and technical resources within the department. In addition, diagnostic services are provided to the medical profession in rural Manitoba through laboratory and x-ray facilities incorporated into eight of the rural health units.

Local Health Units now serve a population of 500,148 outside of the City of Winnipeg and laboratory and x-ray services are provided to 217,736 people in rural Manitoba.

Public Health services are also offered to areas in the province not covered by a health unit through physicians who render these services on a fee-for-service basis or on a regular retainer fee, as stipulated in the contract. Contracts are tailored to meet the special needs of the area concerned.

Thirty-one part-time medical officers are employed by rural Municipalities, Villages, Cities and Towns and 13 part-time Medical Officers are employed by the Department of Health for unorganized territories. Also, two contracts exist between the Province and Medical Clinics to provide necessary medical, clinical and public health services to areas unable to sustain medical care. One public health nurse and two public health inspectors are also available to areas not covered by the Health Services Act.

Some major activities and developments during 1967 include:

1. A Multiphasic Screening procedure in Alonsa and Amaranth area for numerous diseases, i.e., Cancer, Diabetes, etc. was organized and effectively performed by the Neepawa Health Unit staff in co-operation with neighbouring health units.
2. The St. James, Fort Garry, St. Vital Health Unit provided services for follow-up testing in the Fort Garry area in conjunction with a survey instituted by the Sanatorium Board of Manitoba. This follow-up was a double procedure taking up several hours per test in order to definitely diagnose disease already pre-screened in the Area.
3. Expansion into organized Health Units took place north of the 53rd parallel with the result that Thompson, Snow Lake, and Lynn Lake have been incorporated into the Northern Local Health Unit. Also during 1966-67, Laboratory and X-ray Services were expanded to include the Swan Valley Health Unit area. Several areas not now being served by Health Units or Laboratory and X-Ray Units are in various stages of being incorporated into the Health and Diagnostic Services of Manitoba.
4. Transportation of emergency patients to hospital for treatment is a function of Local Health Services. During 1967, 649 acutely ill patients were transported for treatment to hospitals. The bulk of these patients were brought to hospitals in larger centres from outlying isolated districts and the greater number of these had to be moved by aircraft from otherwise inaccessible parts of Manitoba.

Specific Programs:

Community Sanitation:

Public Health Inspectors in local health units carry out programs in the Environmental health field on a continuing basis. Activities concern housing, water supplies, sewers, septic tanks,

garbage disposal, food, milk, restaurants, food sources, health hazards in industry, and epidemic disease control. The Public Health Inspection staff also inspects hospitals in Rural Manitoba in co-operation with the Manitoba Hospital Commission. In 1966-67, inspectors also assumed the duties of inspecting designated transient accommodation.

SANITATION SERVICES IN LOCAL HEALTH UNITS

<u>FIELD VISITS:</u>	<u>1966</u>	<u>1967</u>
Plumbing Inspections	2,309	2,822
Sewage Disposal Systems-Private	1,415	1,735
Municipal Disposal Systems or Water Supply	691	821
Public Premises and Public Accommodation	889	1,265
Industrial Premises & Offices	522	846
Private Premises	2,026	3,017
Camps	161	252
Bathing Premises	595	842
Schools	349	466
Vermin and Rodent Control	586	958

Communicable Disease Control

Most health unit programs are directed toward the prevention and control of disease with special emphasis placed on communicable disease control. Control methods include such techniques as: promoting good nutrition and good health habits from prenatal care throughout life; specific immunization against disease; and provision of biologics and health information to the family physician who is encouraged to play the major role in all aspects related to Communicable Disease.

Health Units assume a leading role in control of outbreaks of contagious diseases such as diphtheria, typhoid, hepatitis, scarlet fever and other diseases which still occur with sufficient frequency and proportion to demand a constant vigilance. Zoonotic Diseases such as rabies, Western Equine Encephalitis and tularemia were given more than usual attention in 1967.

Venereal Disease Control in Local Health Units

Health Unit personnel investigate and follow-up Venereal Disease cases and contacts, and also arrange for diagnosis and treatment. Free drugs are available to the practising physician from the Local Health Units. In cases of indigency or other reasons, arrangements can be made for payment of the cost of treatment to the practising physician, or in areas lacking local physicians, the Health Unit staff will treat Venereal Disease.

Tuberculosis Control

Local Health Units co-operate with the Sanatorium Board in carrying out regular tuberculosis surveys in Manitoba, supervise tuberculosis cases at home, follow-up contacts and arrange for admission of patients to hospital.

The use of B.C.G. in the control of the spread of Tuberculosis has been extended to include three health unit areas within the Province.

Other Services

In the treatment of Rheumatic Fever, the only significant change is that all Penicillin is dispensed directly from the Local Health Unit rather than from a Central Store at Winnipeg. Drugs used in the community mental health program are also stocked and distributed to a limited amount from Health Unit offices while expensive long term

life saving drugs are still supplied on a need basis from the section of Preventive Medical Services.

Prenatal Classes

Pregnancy carries with it inherent risks to the health of the female. To minimize these risks, the health unit conducts prenatal classes. These are educational classes designed to instruct the prospective mother as to regular prenatal care by her family physician, to educate her in nutrition, exercise and health habits during pregnancy, and prepare her for the proper care of the newborn child.

<u>Prenatal Instruction</u>	<u>1966</u>	<u>1967</u>
No. of Classes	343	653
Attendance	3,574	5,482

Child Health Conferences

The local health unit carries out an extensive program in Child Health Conferences available to all children in the health unit area. Here, the public health nurse visits the mother and child in their home soon after discharge from the hospital and often before leaving the hospital. The mother receives counselling and guidance on a regular follow-up basis during the first year of life of the child, and in subsequent visits to Child Health Conferences in the health unit. The mother receives counselling on feeding habits, vitamin usage, and referral to the family physicians in case of discovered abnormalities. Stress is placed on education in the dangers of accidents due to poisoning and physical accident situations.

In January, 1966, AN EVALUATION OF THE WELL CHILD CLINICS IN THE PROVINCE OF MANITOBA was completed and an extended study on Pre-School Child Health is now underway. Both studies are receiving financial support from National Health and Welfare.

The second portion of this Study will be published in 1968.

<u>Child Health Conferences:</u>	<u>1966</u>	<u>1967</u>
Number Held	3,224	2,478
Attendance	28,670	34,984
(a) Infants	13,700	16,629
(b) Preschoolers	12,309	19,948
(c) School Children	278	1,025
(d) Adults	2,188	2,796
 <u>Visits (Nursing Services)</u>	 <u>1966</u>	 <u>1967</u>
Prenatal	631	1,568
Post-natal	6,988	9,064
Infant	8,247	10,568
Preschooler	9,530	11,419
School Child	8,387	10,018
Adult	10,316	13,935
Rheumatic (Prophylaxis)	987	1,089
Diabetic	1,627	2,223
Special Drugs	315	276
Nursing Care & Demonstration Children	1,011	1,034
Home Care for Adults	2,513	3,626
No. of Homes Visited	27,544	33,275
No. of Calls on Officials, Doctors, etc.	5,413	5,739
Rehabilitation Visits	75	333
Office Visits	644	1,339

Preschool Medical Examinations

The Health Unit organizes a preschool medical examination based on the premise that this examination should be done by the family physician whenever possible. The Health Unit however, is prepared to perform this examination if a physician is not available. The examination is intended to ensure that the child suffers no defect that would prohibit him from taking full advantage of available education. Any condition suffered by the pupil is interpreted to the teacher by the Health Unit staff in relation to the child's anticipated progress in school. If necessary, the child is referred to a physician for treatment.

<u>Medical Services</u>	<u>1966</u>	<u>1967</u>
Medical Examinations (1) Preschoolers	2,162	1,806
(2) School Children	1,076	1,966
Defects Detected (1) Preschoolers	542	103
(2) School Children	888	834
Defects treated and corrected	534	384
Field Visits	690	669
Adult Examinations	17	79
Infant Examinations	4	-

School Age

School health programs are carried out co-operatively with School Teaching Staff and now with the help of the Division of the Child Guidance Clinic. Program content includes: Nurse-teacher conferences; lectures to students of a health educational nature; student examination concerning disease or disability both physical and psychological; referrals of handicapped school children for appropriate treatment as indicated by investigation; immunization programs for various diseases.

<u>School Health (Nursing Services)</u>	<u>1966</u>	<u>1967</u>
Pupils interviewed by nurse	11,840	15,685
(1) Visions only	23,069	31,176
(2) Audiometer Testing	6,044	6,974
Teachers Interviewed	-	5,614
(1) Re Pupils	6,154	8,062
(2) Re Health Program	3,130	4,508
Group Instruction	1,428	2,445
Group Inspection	1,990	2,618

Chronic Disease

Health Units have accepted an increasing role concerning care of elderly persons in the community. Programs are concerned with: housing plans; material aid; nursing assistance; educational assistance for the patient and family on procedures required for care of the

patient; arranging for nursing home care or institutional care; and medical assessment of Welfare patients.

<u>Institutional Visits (Nursing Services)</u>	<u>1966</u>	<u>1967</u>
Aged and Infirm Homes	191	266
Child Boarding Homes	21	18
Day Nurseries, Kindergartens	115	55
Foster Homes	410	402
Nursing Homes	151	217
Extended Treatments	127	90
Church Home for Unwed Mothers	1	-

Crippled Children and Adults

Health Units work closely with crippled children and adults, serving to arrange local clinics for visiting clinical teams. In 1967, Health Units were again active in modified follow-up.

Similar co-operative systems are in operation with the Canadian Arthritis and Rheumatism Society.

Mental Health

As an increasing number of patients from Mental Hospitals are being discharged into the community, many of these patients are still on medication for their primary symptoms. Therefore, the Local Health Unit has become more heavily involved in the field of Mental Health.

It is the function of the Local Health Unit to prepare the family for the patient's re-entry into the community, as well as to follow-up as necessary, the patient's progress in the community. This involves visits to homes, supervision of medication that has been prescribed by the Hospital Physicians, and arranging for patients to attend travelling clinics at the Health Unit or clinics based at hospitals. Travelling clinic teams are made up of Psychiatrists, Psychologists and Social Workers sent into rural Manitoba from the Mental Hospitals.

Organizational framework has been laid down and well on the way to completion of the Child Development program in co-operation with

the Department of Education and Child Guidance Clinic, to extend the services into rural Manitoba where at present such services are most needed.

Mental Health Clinics have now extended past the 53rd Parallel to Flin Flon and The Pas, Manitoba. Designation of boundary areas to receive mentally-ill patients in suburban Winnipeg for follow-up by Health Units was completed in 1966, as well as Community Health Clinics, in Stonewall, Gimli and Beausejour.

DIAGNOSTIC LABORATORY & X-RAY SERVICES

Laboratory and X-Ray Services were provided for eight Laboratory & X-Ray Unit Areas. These included Birtle, Dauphin, Neepawa, Portage, Selkirk, South-West, Swan River and Virden. Further expansion is planned.

Laboratory and X-ray Working Committee met four times during the year and discussed various aspects of the laboratory needs; laboratory and x-ray functions, expansion of the data-phone services and others. Three In-Service Laboratory Courses were held in 1967 in Killarney, Dauphin and Neepawa Laboratory Centres. Total attendance was 51. Certificates for all those technologists with full attendance have been presented.

Some administrative changes have occurred in the Portage School and X-Ray and the teaching staff strengthened. Some changes in the Training Program have been implemented during the year.

One Staff Conference of the Senior Technologists was held at the Neepawa Unit and similar quarterly conferences have been planned for 1968. Active concentration is being given by the Department to improve more the training of both laboratory and x-ray personnel for the rural areas, with emphasis on better preparation for work in small country laboratories. Active preparations were made to acquire new equipment and for staffing of the anticipated Southern Unit. Several technicians have been placed in Non-Health Unit areas. Better stability of personnel has been achieved and turnover of staff was slower than in the previous year.

SUMMARY OF LABORATORY AND X-RAY WORK

<u>No. of X-Ray Examinations</u>			<u>Laboratory Work (Dept. of Bureau of Statistics Units)</u>		
Laboratory & X-Ray Unit	In- Patients	Out- Patients	Hospital Admissions Chest	In- Patients	Out- Patients
Dauphin	5,191	6,234	1,861	113,988	56,287
Selkirk	3,416	7,167	1,223	65,628	44,779
Virden	3,134	7,098	1,063	50,396	64,247
Neepawa	3,045	5,362	868	52,328	32,947
Portage la Prairie	3,803	5,926	949	73,320	61,416
Birtle-Shoal Lake	3,719	5,907	544	54,537	43,681
Southwest	2,753	5,410	1,153	49,093	29,966
Swan River	2,788	3,169	359	35,422	10,168
TOTALS	27,849	46,273	8,020	494,712	343,491

MISCELLANEOUS ITEMS OF INTEREST

- (1) Pan American Games held in Winnipeg took up considerable energy and effort of the various health units and sections of the Department of Health within the metropolitan portion of the City as well as some rural areas.
- (2) The Dauphin Health Unit was actively involved in a trial program using live attenuated Schwarz measles vaccine. This vaccine was found to be acceptable for use at rural well-child clinics and has now been introduced as a routine prophylactic agent, although it is possible that other strains and types of vaccines will be investigated in the future.
- (3) The Kildonan-St. Paul Health Unit has undertaken a Pilot project of colour vision testing on all school children in the Health Unit Area. A test that is so designed as to forewarn vocational choice that demands full colour vision.
- (4) The Portage Health Unit has stressed many Safety Factors and Accident Prevention Programs. This Health Unit has been able to obtain the co-operation of Hospitals, Nursing Homes and other institutions for reporting of accidents.
- (5) During 1967, the St. Boniface Health Unit participated in the trials of the new Connaught measles vaccine, "Quint", (DPT polio plus measles), as well as the Connaught straight measles vaccine. Final results of this trial are still pending.
- (6) The Northern Local Health Unit Area has shown much activity in taking on new areas into the unit as well as new programs such as:
 - (a) Introduction of developmental screening assessments at Child Health Conference and follow-up in detail of cases born "At Risk".

(b) Family Life Education Course aimed at the community leaders such as Teachers, Students and other responsible people of the community.

(c) Considerable energy has been expended in setting up a Day nursery through organized community groups for the prevention of secondary mental retardation.

(d) Community Mental Health Education through:

(i) Comprehensive group discursive series for engaged and young married couples;

(ii) Indian-Metis Friendship Centre, and

(iii) Family Planning Counselling. -- These were some of the activities carried on during 1967.

7. The Selkirk Health Unit has on several occasions given needed Public Health Services to Bissett, Manitoba and Whitemouth Village and surrounding Municipality. This has greatly improved the health aspects of the area and it is hoped that these areas will actively enter into a health unit area.

A Diabetic Instruction Clinic has been instituted in the community with the assistance from local practitioners and Provincial Nutritionists. Upward of 15 patients have attended classes weekly and by all appearances, this instruction is greatly appreciated.

The Swan Valley Health Unit has contributed greatly to the integration of the Indian population with its boundaries in the Pine Creek Indian Reserve, Pine Creek School, Shoal River Indian Reserve.

Considerable planning and activity is in progress regarding new buildings at Virden, Gimli and Morden. Many other areas are in various, though lesser advanced stages of building.

RECORD OF POPULATION, ESTABLISHED POSITIONS, STAFF
VACANCIES, AND STAFF ON COURSE IN HEALTH UNITS - 1966-1967

HEALTH UNITS	POPULATION	DIRECTORS	NURSES	INSP.	CLERICAL	OTHERS
Brandon	34,653	1	8	3	2	
Dauphin	25,443	1	6	1	3	
Kildonan-St. Paul	68,800	1	9	3	3	
Neepawa	27,811	1	7	2	3	1 H.Ed.
Portage	34,404	1	8	2	3	
Red River	25,358	1	6	1	2	
St. Boniface	62,687	1	9	4	3	1 H.Ed.
St. James	118,931	1	17	5	6	
Selkirk	42,541	1	9	3	5	1 H.Ed.
Swan Valley	15,975	1	5	2	3	
Northern	30,854	1	8	2	2½	
Stonewall	25,643	1	7	2	2	
Virden	23,446	1	6	1	2	
Birtle-Shoal Lake	21,623	1	6	2	3	
Southwest	19,950	1	6	2	2	
Northern Health Services	25,202	2	7	3	3	1 H.Ed. 6 L.P.N. 1 Caretaker 2 Garbage Collectors
TOTAL	603,321	17	124	38	47½	13
Vacancies		0	6	3	0	2-L.P.N.
On Course		1	11	3	-	-

H. Ed. - Health Educators
L.P.N. - Licensed Practical Nurse

The following figures apply to health units only. They do not include the entire province.

A. COMMUNICABLE DISEASES: (Cases, Suspects, Investigations)

	<u>1966</u>	<u>1967</u>
a. a. Brucellosis (Undulant Fever)	6	3
b. Diarrhoea of the Newborn (Epidemic)	11	9
c. Diphtheria (Case or Carrier)	32	9
d. Dysentery	-	4
(1) Amoebic	1	-
(2) Bacillary	15	26
(3) Unspecified	5	4
e. Encephalitis Infections	-	1
f. Food Poisoning	-	-
(1) Staphylococcus Intoxication	1	64
(2) Salmonella Infections	-	62
(3) Unspecified	52	5
g. Hepatitis, Infectious	91	153
h. Meningitis, Viral or Aseptic	3	3
(1) Due to polio virus	-	3
(2) Due to Coxsackie Virus	-	-
(3) Due to E.C.H.O. Virus	-	4
(4) Other and Unspecified	2	2
i. Meningococcal Infections	1	1
j. Pamphigus Neonatorum	-	-
k. Pertussis	11	23
l. Poliomyelitis, Paralytic	-	-
m. Rabies	41	50
n. Scarlet Fever & Strep Sore Throat	250	261
o. Tetanus	2	10
p. Typhoid and Paratyphoid Fever	36	-
q. Other Specify		
(1) Pink Eye	34	14
(2) Measles	82	1,552
(3) Ringworm	10	6
(4) Pediculosis	26	116
(5) Impetigo	36	188
(6) Chicken Pox	81	189
(7) Mumps	3	400
(8) Scabies	93	60
(9) Gastroenteritis	1	-
(10) Head Lice	-	6
(11) Tape Worm	-	10
(12) Red Measles	-	35
(13) Vincent Angina	-	9
(14) Conjunctivities	-	1
(15) Blood Tests	-	4
(16) Shigella	-	1
(17) Toxoplasmosis	-	1
(18) Malaria Relapse	-	1

<u>B. VENEREAL DISEASE</u>	<u>1966</u>	<u>1967</u>
a. New Cases of Syphilis	16	11
b. New Cases of Gonorrhoea	73	168
c. Contacts of V.D.	35	6
(1) Named	127	171
(2) Located	126	133
d. Field visits	212	262
e. Treated by Health Unit	6	6

<u>C. TUBERCULOSIS</u>	<u>1966</u>	<u>1967</u>
a. New Cases Reported - Total	41	44
(1) Arrested	8	12
(2) Active Bacillary	15	28
(3) Non-Pulmonary	10	6
b. Total Cases Under Supervision at Home	467	759
c. Total Cases in Sanatorium	31	49
d. No. of Chest X-Ray Clinics	17	8
(1) Attendance of Cases	20	1,262
(2) Attendance of Contacts	14	107
e. Field Visits	1,923	2,807

<u>D. IMMUNIZATION</u>	<u>1966</u>	<u>1967</u>
a. Smallpox Vaccination	4,836	4,535
b. Smallpox Revaccination	9,587	1,569
c. DPT (Series Completed)	1,467	1,459
d. DPT - Augmenting	2,251	3,297
e. D.T. (Series Completed)	1,053	714
f. D.T. - Augmenting	29,012	19,715
g. Polio - Series of 3 Doses	315	101
h. Polio - Boosters	261	119
i. DPT with Polio (Series completed)	1,343	1,885
j. DT with Polio - Augmenting	4,038	3,010
k. Typhoid with Paratyphoid	-	105
(1) No. Having Completed Series	290	245
(2) No. Having Booster Doses	97	38
l. Other (Specify)		
(1) Tetanus	1	5
(2) Gamma Globulin	77	59
(3) T.A.B.T. Series	58	76
(4) Typhus	6	9
(5) Diphtheria	2	1
(6) Quad Booster	1,248	536
(7) Cholera	6	25
(8) Sabin	26,378	34,883
(9) Tine Test	73	21
(10) Diphtheria Toxoid - Aug.	5	-
(11) D.P.T. and P. Aug.	1,775	1,191
(12) Immunization - Measles	11	384
(13) Flu Vaccine	-	414
(14) Tetanus Polio	-	10
(15) Quad Aug.	-	36
(16) Live Measles	-	10
(17) Measles	-	3,094
(18) D.T.T. - Sabin	-	637
(19) Polio & Tetanus Booster	-	1
m. Tests		
(1) Schick	324	188
(2) Tuberculin	2,377	1,139
<u>E. MEDICAL SERVICES</u>	<u>1966</u>	<u>1967</u>
a. Consultations & Diagnostic Visits with Physicians	621	556
b. Meetings Attended	736	937
c. Medical Examinations	-	1,111
(1) Preschoolers	2,162	1,806
(2) School Children	1,076	1,966
d. Defects Detected	-	202
(1) Preschoolers	542	103
(2) School Children	888	834
e. Defects Treated or Corrected	534	384
f. Field Visits	690	669
g. Adult Examinations	17	79
h. Infant Examinations	4	-

<u>NURSING SERVICES</u>			
<u>F. SCHOOL HEALTH</u>	<u>1966</u>	<u>1967</u>	
a. Pupils Interviewed by Nurse	11,840	15,685	
(1) Visions Only	23,069	31,176	
(2) Audiometer Testing	6,044	6,974	
b. Teachers Interviewed	-	5,614	
(1) Re Pupils	6,154	8,062	
(2) Re Health Programme	3,130	4,508	
c. Group Instruction	1,428	2,445	
d. Group Inspection	1,990	2,618	
<u>G. VISITS</u>			
a. Prenatal	631	1,568	
b. Post-Natal	6,988	9,064	
c. Infant	8,247	10,568	
d. Preschooler	9,530	11,419	
e. School Child	8,387	10,018	
f. Adult	10,316	13,935	
g. Rheumatic (Prophylaxis)	987	1,089	
h. Diabetic	1,627	2,223	
i. Special Drugs	315	276	
j. Nursing Care & Demonstration Children	1,011	1,034	
k. Home Care for Adults	2,513	3,626	
l. No. of Homes Visited	27,544	33,275	
m. No. of Calls on Officials, Doctors, etc.	5,413	5,739	
n. Rehabilitation Visits	75	333	
o. Office Visits	644	1,339	
p. Home Nursing Care	918	538	
q. Registration for Kindergarten	352	-	
r. Strep Injections	-	5	
<u>H. INSTITUTIONAL VISITS</u>			
a. Aged and Infirm Homes	191	266	
b. Child Boarding Homes	21	18	
c. Day Nurseries, Kindergartens	115	55	
d. Foster Homes	410	402	
e. Nursing Homes	151	217	
f. Extended Treatments	127	90	
g. Church Home for Unwed Mothers	1	-	
h. Hospitals	4	83	
<u>I. FIELD INSTRUCTIONS (No. of Days)</u>			
a. With New Staff Members	274	384	
b. With Hospital Students	809	699	
c. With University Students	32	3½	
<u>J. INSTRUCTION AND EDUCATION</u>			
a. Prenatal Instruction	-	27	
(1) No. of Classes	343	653	
(2) Attendance	3,574	5,482	
b. Meetings attended or held	-	59	

<u>K. FIELD VISITS</u>	<u>1966</u>	<u>1967</u>
a. Plumbing Inspections	2,309	2,822
b. Sewage Disposal Systems-Private	1,415	1,735
c. Municipal Disposal Systems or Water Supply	691	821
d. Public Premises & Public Accommodation	889	1,265
e. Industrial Premises and Offices	522	846
f. Private Premises	2,026	3,017
g. Camps	161	252
h. Bathing Premises	595	842
i. Schools	349	466
j. Vermin and Rodent Control	586	958
k. Ice Cutting and Storage	14	52
l. Waste Disposal Grounds	467	514
m. Nuisances	2,673	3,850
n. Institutions and Boarding Homes	502	673
o. Barbershops	508	679
p. Office Visits	2,261	744
q. Foster Homes	59	59
r. Day Nurseries and Kindergartens	24	-
s. Plumbing and Drainage	78	122
t. Interviews	219	-
u. Keeping Animals	4	1
v. Cemeteries	-	1
 <u>L. FOOD AND MILK</u>		
a. Raw Milk Producers	646	345
b. Milk Processing Plants	257	295
c. Food Retail Outlets	1,031	1,383
d. Restaurants and Beverage Rooms	2,886	3,952
e. Food Processors (Incl. Ice Cutting and Bottling Plants)	482	751
f. Food Complaints	190	245
g. Food Handlers Survey	694	702
h. Interviews	128	12
i. Food Transportation Vehicles	3	-
j. Milk Distributors	-	3
 <u>M. SAMPLING AND FIELD TESTS</u>		
a. Bacteriological Analyses - Water	7,107	10,077
b. Milk - Raw	1,822	2,670
c. Milk - Pasteurized	2,451	3,213
d. Food	336	99
e. Swab Rinse Tests	492	1,001
f. Field Tests (O.T., C.O., Etc.)	841	982
g. Chemical Analysis - Water	40	-
h. Chemical Tests	-	95
i. Survey - Brooklands	-	1
j. Water Samples	-	1

<u>N. EDUCATION</u>	<u>1966</u>	<u>1967</u>
a. Meetings Attended or Held	1,116	1,469
b. Presentations Given	383	608
c. P.H. Attendance	-	3,400
<u>O. MENTAL HEALTH</u>		
a. Field Visits	4,182	5,857
b. Mental Health Clinics	-	14 ¹ / ₂
(1) No. Held in Unit Area	279	375 ¹ / ₂
(2) Attendance	2,563	4,038
c. Speech Therapy	-	5
(1) No. of Clinics	13	85
(2) Attendance	69	267
d. Mental Health Conferences	-	12
<u>P. CRIPPLED CHILDREN, ADULTS</u>		
a. Field Visits	845	1,048
b. Diagnostic Clinics - No. Held	3	3
(1) Attendance	65	65
c. Physiotherapy Clinics-No. Held	-	-
(1) No. Receiving Treatment	-	-
d. Visits to Cancer Patients	62	62
<u>Q. DENTAL HEALTH</u>		
a. No. of Clinics Held	14	36
b. No. of Dental Days	141 ¹ / ₂	190
c. No. of Examinations	477	1,471
d. No. of Patients Treated	1,050	2,008
e. No. of Patients Completed	414	481
f. Fluoride Treatment	114	640
<u>R. ADMINISTRATIVE</u>		
a. Health Board Meetings - No.	85	93
b. Staff Conferences - No.	157	53
c. Child Health Conferences	-	401
(1) No. Held	3,224	2,478
(2) Attendance	28,670	34,984
(a) Infants	13,700	16,629
(b) Preschoolers	12,309	19,948
(c) School Children	278	1,025
(d) Adults	2,188	2,796

<u>GERIATRICS</u>	<u>1966</u>	<u>1967</u>
a. Private Homes	287	1,171
b. Boarding Homes	862	902
c. Nursing Homes	1,985	1,362
d. Hospitals	325	209
Adults visited over 64 years of age	635	1,044
Pre-School Registration	1,522	2,204
Pre-School Interviews	679	2,165
Color Vision Testing	-	799
Sprigle Tests	-	81
Lirugen	-	634
Mothers Interviewed	-	181
Topical Fluorides	-	735
Pre-School Clinics (Birtle-Shoal Lake)	-	16
Pre-School Clinics (Attended)	-	359
Measles Vaccine	-	371
Surveillance of Measles	-	75
Cytology Examinations	-	18

ENVIRONMENTAL SANITATION SECTION

The Section of Environmental Sanitation provides specialized services in five major fields associated with our environment:

1. A group of five engineers are concerned with public water supplies, waste disposal, training of water and sewage plant operators, general water quality in the Province, and swimming pool design.
2. The Food Control Bureau, with four agrologists on staff, share the responsibility for the safe quality and wholesomeness of milk and foodstuffs for human consumption with associated federal and provincial agencies.
3. Water and waste analyses, industrial environment assessment and atmospheric testing are only a few of the programs carried out by the Bureau of Industrial Hygiene with four chemists, one laboratory assistant and five technicians on the staff.
4. General inspectional services are provided for areas not yet served by full time local health units and districts. A total of ten inspectors, including the chief, provide these services as well as participating in special programs and more general departmental activities.
5. The technical staff of the Provincial Sanitary Control Commission, consisting of an engineer, a chemist, and a technician are on the staff of the Section but operate under the direction of the Commission which is inter-departmental in function.

PUBLIC HEALTH ENGINEERING

The bureau operates under the director of the section as chief engineer with the work program being detailed by a senior engineer. The

emphasis on functional public health engineering is shifting year by year as well qualified inspectors in health units and districts take over the basic programs.

There are five main areas of activity:

1. The municipal field, with its attendant vital utilities such as water supply and treatment, waste collection and disposal, sewage treatment and effluent discharge.
2. Pollution assessment - the identification and measurement of liquid, solid and gaseous emissions which may effect the quality of the water, the soil and the air in the living and working environment.
3. Education and training - of the men who operate the municipal water works and sewage treatment plants; arrangements for the training of municipal plumbing inspectors and potential public health inspectors; and informational discussion and training groups for public swimming pool operators.
4. Functional recreation - assistance with the design of public swimming and wading pools with the attendant problems of water supply and treatment and waste disposal. This includes the large modified swimming pools which are a popular attraction in Manitoba.
5. Contemporary research and investigation - which includes specific research on such diverse subjects as the treatment of bathing pool water and the effect of sewage effluent on arable soils, as well as the continuing study of environmental problems of significance to industry and to the public.

A staff of five public health engineers cover the field, with each individual specializing to some extent in one or more of the

major functional divisions.

Municipal Waterworks and Sewerage

This is a very active area. Not only are more and more waterworks systems being installed but the continuing and growing demand for assistance and training in the operational field is difficult to satisfy.

The work of the Manitoba Water Supply Board in searching, locating, developing and providing potable water supplies for many municipalities is very significant and has undoubtedly substantially contributed to the overall 'modernization' of Manitoba.

Most municipal programs include sewerage as well as water supply. Some of the communities involved in new or extended waterworks systems and sewage collection and treatment installations include Angusville, Ethelbert, Gillam, Ile des Chenes, Medora, McAuley, Oakburn, Plum Coulee, Rapid City, Ste. Agathe, Sandy Lake, Somerset, Waskada, and Wawanesa. In addition changes have been made in the sewage treatment system at Boissevain. While some of these works are still under construction the majority will be in operation by the end of the year 1967. A detailed list of municipal systems are available on request.

As a major factor in the health and comfort of the citizens the provision of safe pure water and adequate innocuous sewage disposal must remain a priority demand on the time and skill of public health engineers.

Pollution Assessment

With current concern, if not apprehension, about the eventual effect on the health of the people of the discharge of trade, industrial and municipal wastes into the environment it is reasonable to expand

and enlarge the technical facilities for the identification, measurement and evaluation of all kinds of solid, liquid and gaseous emissions which might add to the contamination of soil, water and air.

Major water polluting agencies are under a degree of control through the functioning of the provincial sanitary control commission.

Education and Training

On both an economic and a functional basis it is a sound procedure to bring men together for instruction in such matters as water treatment plant operation but this must be supplemented by regular and periodic visits of engineers to the individual communities.

For over ten years now municipalities and other interested agencies have been invited to send waterworks and sewage system operators to Winnipeg in the spring of each year. The courses provided follow a design common to the three prairie provinces and originate with the Western Canada Conference on Water and Sewage.

In other respects the engineers are associated with the planning and implementation of courses for trainee public health inspectors, municipal plumbing inspectors, correspondence courses for waterworks operators and forums for bathing pool attendants. A special project course on water and waste water treatment is run once a year on behalf of the Department of Civil Engineering of the University of Manitoba.

Swimming Pools

Under the current regulations pursuant to "The Public Health Act" any public swimming or wading pool requires approval of the Minister of Health. The engineering bureau undertakes to scrutinize proposals for new pools on his behalf and also ensures that representatives of the local health authority are brought into the preliminary discussions.

This is very important since under the same regulations the operation of each pool is subject to a yearly permit from the medical officer of health, who may impose specific conditions or restrictions within the terms of the permit.

Research and Investigation

The engineering bureau this year initiated further study into several practicable problems, the first of these dealing with various methods of rendering bathing pool waters safe and sanitary, the second an investigation into the possible detrimental effect of sewage effluent flooding cultivated land. Preliminary reports on both projects were prepared for the re-submission of the grants in 1968. In addition three other projects have been submitted for consideration being i) health hazards in enclosed parking spaces, ii) analysis of solid waste disposal operation, and iii) aerated sewage lagoon investigation. The bathing pool water project has been approved for 1968-69.

Fluoridation in Manitoba

Manitoba maintains its position as a leader in the practice of fluoridating public water supplies to provide a bulwark against the incidence of dental caries. The communities of Russell and Baldur began fluoridation in 1967. The Village of MacGregor will begin fluoridation early in 1968.

FOOD CONTROL

Food Control Programs during 1967 have been related to health safety in the production, processing, transportation, storage, and sale of food products. Emphasis has been directed toward providing a technical support service for local health authorities, establishing preventive programs, and generally ensuring that food products are

safe for consumption.

There has been an increasing demand for service resulting from an increasing awareness by the public as regards health safety, and increasing technological change in the food industry.

MILK

Twenty-four milk pasteurization plants operated under Ministerial Certificate during 1967--no change from 1966. These plants have continued to operate in compliance with the Public Health Act Regulations, and the Minimum Requirements adopted under the Regulations with pasteurized milk products being made available throughout the entire Province. A detailed list of these plants is available on request. Continuing improvements can be reported in processing operations at both the producer and plant levels--all in line with newer processing technology. Milk program activities have included:-

- Continued review of the Public Health Act Regulations respecting milk and milk products, and the Minimum Requirements for Milk Plants to ensure public health safety standards.
- Application of Minimum Requirements for Milk Plants on a continuing basis including construction, equipment, process standards and operations.
- Continued reassessment of standards for raw milk production, quality tests for raw milk and interpretation of analyses.
- Coordination of pasteurized milk product sample submissions to laboratories, establishing standards, interpretation of results, and plant appraisals.
- Computer programming of both raw and pasteurized milk programs.
- Participation on the mastitis, and quality control committees.

- Provision of advisory and consultant service to local health authorities, producers, processors, and other governmental agencies.
- Meetings with producers, consumers, processors, and others as required.

FROZEN FOOD LOCKER PLANTS

Seventy-three frozen food locker plant permits were issued under "The Frozen Food Locker Plant Act" during 1967, a reduction of two plants from the previous year. A detailed list of plants is available on request. The frozen food locker plants have continued to provide processing, freezing, and cold storage service to patrons. The improved slaughter facilities have encouraged the provision of complete service, including slaughter, in many areas.

Activities under "The Frozen Food Locker Plant Act" have included:-

- Administration of the Act and Regulations.
- Member and Secretary of the Advisory Board.
- Assessment of plant operations with local health authorities and industry.
- Meetings and discussions with the plant operators, and the Manitoba Quick Freeze and Meat Processors Association.

MEAT

During 1967 slaughterhouse operations in Manitoba included:-

- Eight Canada Approved Export Plants.
- Four Domestic Canada Approved Plants.
- Twenty-three Plants licensed by the Minister of Health.

A detailed list of plants is available on request.

The period of adjustment allowed slaughterhouse operators to

meet improved standards expired June 30th, 1967, and it is reported that all slaughterhouses under Ministerial license now meet the requirements. Current programs are designed to ensure continuous conformity with the regulations as well as incorporation of newer technology as it develops.

Activities in the meat program have included:-

- Consultant services to slaughterhouse operators, and meat processors in respect to construction, equipment, and operational standards.
- Consultation with municipalities, local health authorities, and industry in respect to meat programs.
- Investigations, analyses, and reporting upon complaints, and enquiries respecting health safety of meat products for local health authorities.
- Participation on the Interdepartmental Committee on Meat and Federal-Provincial Standards Committee.
- Disposal of dead animals.
- General administration in respect to the legislation.

BOTTLING PLANTS

Eighteen bottling plants operated under Ministerial Permit during 1967-a reduction of one plant from 1966. A detailed list of plants is available on request. Extensive modernization programs have been completed in several plants, enquiries from local health authorities respecting health safety of the products have received prompt attention; and control programs have been continued with laboratory examinations. It is proposed to review the legislation during 1968.

FOOD PRODUCT ANALYSES

Food safety and wholesomeness determinations conducted by food

control staff have increased during 1967. This is a support service provided local health authorities cooperatively with the Provincial Laboratory, Preventive Medical Services, and the Environmental Health Laboratory, and involves a wide range of food products. It is recorded that investigation procedures, examinations, interpretation and reporting procedures have again improved during 1967.

GENERAL ACTIVITIES

- The food equipment evaluation service in respect to health safety has been continued and expanded.
- A coordination and consultation service on food was provided in respect to the Pan-Am Games.
- The fish station program has been continued cooperatively with the Fisheries Branch, and local health authorities.
- Technical assistance has been provided the food service industry, and local health authorities in organizing, developing, and presenting training courses for food service personnel.
- The pesticide residue testing program for Manitoba food products has continued with coordination by the Special Committee.
- Small bacteriological kits (438) for educational purposes have been distributed on a request basis to Grade VIII and IX Science classes throughout Manitoba.

SPECIAL ASSIGNMENTS

Special assignments as determined by the Department, and the Section of Environmental Sanitation have continued to be an important function of Food Control. Included are:-

- Special Committee on Pesticide Residue Testing Programs.
- Quality Control Committee on Dairy Products.

- Dairy Board of Manitoba.
- Interdepartmental Committee on Meat.
- Advisory Board under "The Frozen Food Locker Plant Act."
- Advisory Committee on Education and Training of Food Service Personnel.
- Agricultural Rehabilitation Development Program Representative.
- Emergency Supply Planning Branch and Emergency Measures Organization.
- Manitoba Rural Safety Association and Western Canada Farm Safety Conference.

INDUSTRIAL HYGIENE

The Industrial Hygiene Services of this Section provide a technical backup for the many governmental agencies which are concerned with the health and safety of the adult working population. These include the local Health Units and Departments, the Dept. of Labour, the Mines Branch and the Workmens' Compensation Board. The services range from those of an Industrial Medical Consultant, a complete technical information service and the facilities of the Environmental Health Laboratory. This laboratory provides service not only to industrial problems but also in regard to general environmental conditions, such as water analyses and treatment, waste disposal, air pollution, etc. Industrial Hygiene services also include the administrative handling of all licenses for radioactive isotopes which are issued in Manitoba by the Atomic Energy Control Board. There are about 150 licensees ranging from simple fire-alarm installations to multiple source users in industry, medicine, and university departments.

COMMUNITY AIR POLLUTION SURVEY

The Metropolitan area of Greater Winnipeg has been a part of a National Air Sampling Network since 1957. For the last two years the City of Brandon was also included in this surveillance. A continuous study of dustfall, smoke, suspended particulate matter, sulfur dioxide and hydrogen sulfide is being made. This is to establish baseline data which can be used to detect long-term trends and against which specific complaints can be measured. Due to heavy commitments in other areas this survey has been kept to a very bare minimum.

AIR POLLUTION - SPECIFIC SURVEYS

Many specific studies were made at the request of local authorities to determine compliance with Provincial Air Pollution Regulations. The following types of emission sources were investigated:-

Sausage Plant	Commercial Incinerator
Foundry	Steam Plant
Asphalt Plants	Fish Meal Processor
Tannery	Sugar Manufacturer
Feed Mill	Transport Terminal
Concrete Mixing	Nitric Acid Manufacturer
Fertilizer Plants	

Much of the data required is based on continuous sampling over extended periods. This requires a variety of automatic sensing and recording devices. This service is slowly being developed to take advantage of new methods of sampling and analyses.

SILICOSIS PREVENTION PROGRAM

This program is concerned with the prevention of silicosis or asbestosis of occupational origin. It deals primarily with the mining,

foundry, and insulating industries but may include sand processing, sand-blasting and granite cutting. Each year over 4000 workmen are examined, x-rayed and licensed under the Silicosis Medical Program which is conducted in cooperation with the Workmen's Compensation Board and the Mines Branch. Increased mining activity and extended coverage of workers exposed to asbestos has resulted in a record number of licenses.

LEAD POISONING

This occupational disease is still a major problem affecting hundreds of workmen in certain industries such as non-ferrous foundries, battery manufacture and lead smelting. The severe climate and resulting ventilation problems partly contribute to this. The laboratory provides a continuing service of biological analyses and industrial hygiene assessment.

ASSESSMENT OF ENVIRONMENTAL HEALTH HAZARDS

In addition to the specific hazards recorded above (lead and silica) a wide range of other chemical and physical hazards are dealt with by the staff of chemists, engineers and technicians in the well equipped laboratory. Requests for services come from the public, industry, Department of Labour, Department of Agriculture, Mines Branch, Workmen's Compensation Board, local health agencies and other groups.

There have been the usual variety of complaints and requests involving solvent vapors, gases, dusts and fumes in a number of industrial processes. Of particular interest in 1967 have been studies concerning carbon monoxide, organic mercury, radioactive materials, plastics and asbestos. The study, started in 1966, on carbon monoxide hazards in underground parking garages, has been continued and has been

extended to about 20 premises mostly high-rise apartments. Particular attention is given to control of the carbon monoxide by ventilation and automatic sensing and alarm systems. Related to this is an arrangement with Metro Planning Division whereby members of our chemists and engineering staff provide plan examinations for new premises based on the experience and criteria which have been obtained from this study. In cooperation with the Fire Commissioner's Office a large number of spray painting operations have been checked for both health and safety features. The assessment of noise and vibration both in factories and community situations has now become well established and this laboratory has conducted studies in several machine shops, offices and business premises. Surveys of organic mercury exposures in seed treating plants have continued but with less frequency than formerly since the established control measures appear to be satisfactory.

Although the technical surveillance of users of radioactive materials in the province is handled mainly by the Federal Department of Health, National Health and Welfare, many administrative problems are handled by this section. This has included checking installations for compliance with the licensed conditions, swab tests, interviewing prospective licensees, and notifying local authorities concerning shipments of radioactive materials.

In the agricultural field the development of "slotted-floor" barns for cattle has been of interest. Several studies were conducted on the hydrogen sulfide hazard from the periodic removal of manure from these installations.

WATER AND SEWAGE ANALYSES

This is by far the largest program in the laboratory with over 11,000 chemical analyses completed annually. A routine water analyses

are done on samples from municipal water and sewage plants, industrial waters, institutional and private supplies. Along with this is the participation of the laboratory staff in annual training programs for water and sewage plant operators and others. By arrangement facilities are made available for analytical work by the Water Control and Conservation Branch, Fisheries and Wildlife Branches, Department of Agriculture, National Wildlife Service and others. Part of the program started in 1966 for the International Joint Commission on the Red River is being continued on a surveillance basis. In cooperation with the Soils and Crops Branch a study was made on control of aquatic vegetation in a lake and reservoir at Neepawa, Manitoba. Work done for the Animal Nutritionist led to development of a method for reduction of alkalinity in water supplies for stock feeding. Monitoring of 20 municipal water supplies for fluoride is done on a continuing basis. The results from this and several other analytical programs are subjected to computer analyses with the assistance of the Computer Centre of the Treasury Department. A new area of interest in water supplies concerns organic residues such as pesticides. Plans are well under way to develop special sampling devices for this purpose and to undertake a survey of both raw and treated water sources across the province.

PUBLIC HEALTH INSPECTION

General public health inspection services are provided by 10 inspectors located in Winnipeg to areas not served by local health units.

This section was active in 1967 in various centennial projects and activities pertaining to the Pan-American games. Many of the original sites for the centennial caravan were changed from those originally proposed and thus much time was spent checking these new

sites. One of the members of the staff of this office was in attendance at every caravan location when these were in non-health unit areas. The inspection of centennial projects in the various villages and towns was also very time consuming.

Various activities in connection with the Pan-American games were also located in areas served by this office and thus it was necessary to ensure that adequate suitable facilities were available both for the public and the competitors in these various locations.

During 1967 the number of persons receiving service from members of this staff has decreased approximately 35,000 due to the absorption of general municipalities into the local health units.

Whiteshell Forest Reserve

As in previous years one inspector was located at Falcon Lake, during the summer months, with his activities confined to the Whiteshell Forest Reserve.

In an attempt to eliminate the complaints of swimmer's itch received the previous year, the parks officer and inspector combined forces in the application of copper sulphate to Falcon Lake. A total of 1000 pounds, in both crystal and powdered form, were applied to this body of water on June 28th and not one complaint of swimmer's itch was recorded for the current year. It is hoped this program will continue in future seasons.

A total of 29 multiple tourist facilities operate in this area with a total of 307 living units. All these facilities were inspected in the current year.

Plumbing and drainage installations continue to be time consuming as the present trend is for residents to insist on at least

a modified plumbing system for their summer homes whereas a few years ago a properly constructed privy was considered adequate. A complete plumbing system appears to be the preferred installation but due to various factors the cottage owner often has no choice but to install a modified plumbing system.

This year through the co-operation received from the parks branch it has been possible to provide all auto trailer residents with a copy of the pamphlet entitled "Lock Up". As a result the majority of refrigeration facilities, located on the exterior of auto trailers, are now fitted with locking devices so they no longer pose a hazard to children in the area. The various types of auto trailers now available is changing the current concept of summer resorts as this accommodation is becoming more and more the type preferred and the provision of public washroom facilities is increasing in importance.

Waste Disposal, Plumbing Installations and Water Supplies

The inspection of plumbing installations and sewage disposal systems continue to occupy much of the time of personnel from this section. Many of the smaller centres are installing sewerage systems and eventually this will result in a decrease in the plumbing inspections carried out by personnel from this office. Some difficulty has been encountered in these smaller centres in locating suitable personnel to assume duties as plumbing inspectors. In many cases the inspectors from this office are carrying out the inspections required initially and a local person is accompanying the inspector in order to gain experience. After a suitable orientation period this individual will assume duties as the local plumbing inspector. Departmental inspectors are still available for consultation after this initial orientation period.

Amendments to the plumbing regulations now permit the installation of sewage ejectors, discharging on the ground surface, in lieu of the disposal fields normally installed in conjunction with septic tank installations. These installations are subject to such additional modifications as the local Medical Officer of Health may require. Due to initial costs the number of these installations is still not great but the main advantage which may gain them wider acceptance is the reduced incidence of freezing with this disposal system.

Food and Milk

Pasteurization plants and milk shippers in this area have been inspected on a regular basis and milk samples have been collected according to schedule.

Eating establishments, due to availability of staff, have received more attention this year. Food handling establishments in the Dufferin municipality received additional service due to the tourist influx for the Pan-Am Games. The increased number of halls in rural points and the centennial activities in all areas resulted in an increased number of requests for inspections from the Liquor Control Commission.

The slaughterhouse improvement program has necessitated many additional visits to these establishments. Most of the small slaughterhouses now operating in these rural areas now contain some of the most up to date equipment available for their type of operation.

Training

One class of six students completed their studies and passed their qualifying examinations in September of 1967. One of these men is on a one-year leave of absence while the remaining five are filling staff vacancies.

During the past year five public health inspectors resigned for more rewarding employment elsewhere and on December 1, 1967 the Chief Public Health Inspector retired.

At present three men are undergoing training at Ryerson Polytechnical Institute in Toronto and will be available for employment in October, 1968. Two additional men are also undergoing training at the British Columbia Institute of Technology on the first course conducted by that institute and which is of two years duration. These men should be available for employment approximately June 1, 1969.

The recruitment of suitable personnel to undergo training as public health inspectors is becoming more difficult. The student graduating from grade twelve, at the present time, has many attractive opportunities offered to him and as a result is reluctant to enrol in the two year training program now required for inspectors.

Bedding and Upholstery

General

Regulations passed this year now require that all persons doing business in this province, and to whom these regulations apply, must now be registered. Brandon and Portage la Prairie were not visited owing to late approval of the new regulations, and the necessity of concentrating efforts in the Metro Area, in an endeavour to get all manufacturers and renovators registered.

During this period 1891 calls were made in the Metro Winnipeg area, Selkirk and Transcona. Several complaints were received from consumers during this period and all were adjusted to their satisfaction.

Factories

Two hundred and five calls were made on the factories manufacturing Bedding and Upholstery. All linters, picker, raw sisal and motes were from bona fide producers and not from processors. Coloured material produced in the Metro area was from new material, and no trace of second hand woolens etc. was found in any of the coloured stock being used.

Distributors

Ninety-three calls were made, and no difficulties encountered. Distributors and Wholesalers showed considerable interest in the new regulations, particularly the portion requiring renovators to register with the Department. In future they will be able to request registration numbers before making a sale, and eliminate sales to "moon-lighters", which has caused considerable friction between the legitimate renovators and wholesalers in the past.

Retailers

Retailers received 1018 calls and it was found that considerable more items were being imported from Europe and the United States. For the time being State approved Health Labels on United States items are being accepted, rather than requiring U.S. manufacturers to register under our regulations.

Shops (Renovators, etc.)

Four hundred and nine calls were made to shops and it was noted a new trend is taking place. A large number of shops which were only renovators, have now commenced manufacturing new items, which they either offer for sale on their own premises or sell to retailers for resale. This has upgraded many of the shops, and has made a considerable difference in the cleanliness and housekeeping in these shops.

PROVINCIAL SANITARY CONTROL COMMISSION

The control of pollution of the surface watercourses of this Province is vested generally in the Provincial Sanitary Control Commission with some local jurisdiction carried by the Metropolitan Corporation of Greater Winnipeg, both under the supervision of the Minister of Health.

The Commission has been re-organized with Dr. Peter Warner as Chairman and Messrs. M.J. Gobert, W.J. Johnston, Q.C., L.A. Kay, W.C. McLean, N. Mudry and H.M. Sleigh as additional members.

The Commission issues licenses for the discharge of sewage and industrial waste effluents, except in the Metropolitan Winnipeg area, generally where the discharge is of a continuing rather than intermittent nature. Local problems of casual contamination of water sources may be handled under appropriate regulations pursuant to The Public Health Act, whereas the Commission functions under the terms of the Pollution of Waters Prevention Act.

The ten-year program of the Metropolitan Corporation of Greater Winnipeg is progressing at a rate which should ensure substantial completion by the end of the period (1961-1970). Trial sewage lagoon aeration processes are being installed at the Charleswood site and the construction of major interceptor sewers for the southern region will be proceeding shortly. Sometime in 1969 it is expected that the choice will be made as to whether standard sewage treatment or aerated lagoons should be installed to serve the southern part of the Metropolitan area.

The report to the International Joint Commission on pollution of the Red River was finalized in 1967. After consideration the

International Commission will in turn report to the various governments.

The licenses issued by the Sanitary Control Commission during the calendar year of 1967 are listed separately.

ENVIRONMENTAL SANITATION

Waterworks and Sewage Plant Operators' Schools

<u>Year</u>	<u>Attendance</u>			
	<u>1st Year</u>	<u>2nd Year</u>	<u>3rd Year</u>	<u>Refresher</u>
1955	23	-	-	-
1956	29	25	-	-
1957	18	14	19	-
1958	19	16	10	8
1959	21	22	16	8
1960	10	17	15	9
1961	15	10	16	7
1962	25	14	13	26
1963	33	25	14	32
1964	27	30	20	36
1965	54	31	35	47
1966	28	30	25	42
1967	75	40	41	72

The course requires three years for completion and a certificate is issued to those operators attending. In addition, a refresher course has been developed in order to acquaint interested operators with advanced information and the latest developments.

Communities with Fluoridated Public Water Supplies

<u>Municipality</u>	<u>Status</u>	<u>1966 Population</u>	<u>Date Started</u>
Altona	Town	2,088	Nov. 4, 1966
Baldur	U.I.V.-R.M. Argyle	400 (est.)	Nov.15, 1967
Boissevain	Town	1,455	Jan.11, 1957
Brandon	City	29,570	Mar.8, 1955
Carman	Town	1,888	Nov. 3, 1965
Dauphin	Town	8,444	May, 1958
Gimli	Town	2,205	Dec.23, 1963
Gretna	Village	500	Nov. 4, 1966
Hartney	Town	624	Dec.16, 1964
Killarney	Town	1,810	Oct.25, 1960
Manitou	Village	879	May 15, 1965
Minnedosa	Town	2,286	July 7, 1960
Neepawa	Town	3,170	July 10,1963
Portage la Prairie	City	12,784	Jan. 13,1958
Pinawa	Ind. Town	1,319 (est.)	Jan.14, 1964
Russell	Town	1,495	Mar. 1, 1967
The Pas	Town	4,952	July 23,1964
Souris	Town	1,801	Nov. 5, 1963
Steinbach	Town	4,596	May , 1960
Winkler	Town	2,533	June 24,1964

Note: The Village of MacGregor who have received approval to fluoridate will proceed with the installation of equipment in early 1968.

MUNICIPALITIES SERVED BY METROPOLITAN CORPORATION OF
GREATER WINNIPEG WATERWORKS DIVISION

Assiniboia	R.M.	18,878	Fluoridation program started Dec.18, 1956
Charleswood	R.M.	7,334	
E. Kildonan	City	28,724	
Fort Garry	R.M.	21,052	
N. Kildonan	R.M.	11,906	
Old Kildonan	R.M.	1,389	
St. Boniface	City	43,008	
St. James	City	39,752	
St. Vital	City	29,443	
Transcona	City	19,679	
Tuxedo	Town	2,472	
W. Kildonan	City	22,219	
Winnipeg	City	254,837	
		585,550	- Total Manitoba pop- ulation consuming artificially fluori- dated water (preliminary 1966 population figures)

Total Manitoba population is approximately 959,000; thus, about 61% of the population is served with water artificially fluoridated to a level of one part per million fluoride (F).

Swimming Pools and Operator Training

In 1967 three apartment houses and 3 municipal swimming pools were reviewed. A new Young Women's Christian Association swimming pool was also reviewed.

Six wading pools were also included. Of the pools and wading pools reviewed in 1967 three were Centennial Projects.

<u>Standard Pools</u>		<u>Approval Number</u>
1. Y.W.C.A., 447 Webb Place	Winnipeg	97
<u>Modified Standard Pools</u>		
1. Canterbury House, 270 Roslyn Road	Winnipeg	98
2. Kinsman Pool, Park St. & Louise Ave.	Brandon	99
3. Kildare Avenue at Wabash Street	Transcona	100
4. Stony Mountain Centennial Project	Stony Mountain	101
5. Tiffany Towers, 1179 Grant Avenue	Winnipeg	104
6. Norway House, 1301 Rothesay	North Kildonan	108
<u>Wading Pools</u>		
1. Belle Isle Resort	Rathwell	102
2. Stony Mountain Centennial Project	Stony Mountain	103
3. Playground, Sage Place & Muriel St.	Assiniboia	105
4. Playground, Ness Ave. & Knox St.	St. Charles	106
5. Vermilion Park, Centennial Project	Dauphin	107
6. Green Acres Park	Teulon	109
<u>Modified Pools & Artificial Lakes</u>	NIL	-

<u>Operator Training</u>		<u>Attendance</u>
1959	June 23rd	50
1961	April 10th-13th	60
1963	June 3rd-7th	28
1964	June 25th-26th	45
1965	June 11th	50
1966	June 30th	50
1967	June 28th-30th (Staff of City of Winnipeg wading pools)	92

Industrial HygieneSummary of Silicosis Survey

	Total No. of Men Examined	No. of Certs. Issued	No. of Certs. Refused
<u>MINES & QUARRIES</u>			
Hudson Bay Mining and Smelting Company Limited	1,791	1,791	0
International Nickel Company	3,225	3,225	0
R. Lundstrom Contracting	39	39	0
Manitoba Government, Department of Mines & Natural Resources	5	5	0
Masse & Gauthier Associates	54	54	0
Patrick Harrison Company	112	112	0
J.S. Quinn Construction	7	7	0
San Antonio Gold Mines	138	138	0
Shaft Sinkers-J.S. Redpath Company Limited	7	7	0
Sherritt Gordon Mines Limited	569	568	1
Wescore Drilling	77	77	0
TOTALS	6,024	6,023	1
<u>FOUNDRIES & SANDBLASTERS, ETC.</u>			
Abex Industries	72	72	0
Anthes Foundry	131	130	1
Bay Bronze	11	11	0
Bell Foundry	69	68	1
Canadian Bronze	69	69	0
C.P.R. Foundry	4	4	0
Dominion Bridge	3	3	0
Griffin Steel	99	99	0
Manitoba Bridge	41	41	0
Midwest Diamond Drilling	7	7	0
Monarch Machinery	60	60	0
Prairie Foundry	27	27	0
Riverside Ironworks	4	4	0
Standard Gas	4	4	0
Tallman Gravel	12	12	0
Thor Foundry	8	8	0
TOTALS	621	619	2
<u>ASBESTOS WORKERS</u>			
Hall's Associates	7	7	0
Hilton Insulation	1	1	0
Winnipeg Insulation	3	3	0
TOTALS	11	11	0
GRAND TOTALS	6,656	6,653	3

Public Health Inspection

Community Health Activities

Field Inspections

Meetings & Group Instruction	77
Swimming Pools and Bathing Beaches	72
Local Officials	145
Health Unit Officials	95
Public Rest Rooms	52
Nuisance Ground	37
Nursing Homes & Institutions	13
Industrial Plants	43

Water Supplies

Wells	221
Surface Waters	50
Municipal Supplies	102
Chlorinating Appliances	47
Samples: Bacteriological	1,053
Samples: Chemical	72
Field Tests Nutrate	12
Field Tests O.T.	40
Field Tests Other Sources	8

Sanitation of Premises

Tourist Camps	129
Summer Camps	25
Camps	3
Motels and Hotels	102
Hospital Sites	5
Schools	29
Complaints	175
Barber Shops	27
Community Rat Control Effort	6
Rat Eradication - dwellings	13
Insect Eradication	4
Stored Food Insect Control	8
Skunks	4
Plumbing Systems	547
Septic Tanks & Disposal Fields	445
Modified Septic Tank Systems	46
Municipal Treatment Plant	36
Lagoons - Private	2

Food Control and Milk Supply

Fluid Milk Plants	31
Milk Producers	67
Samples for Laboratory	400
Eating Establishments	277
Frozen Food Locker Plants	36
Slaughterhouses	77
Retail Food Stores	49
Food Processing Plants	10
Bakeries	7
Fish Stations	64
Food Poisoning & Complaints	17

Licenses Issued by the Provincial Sanitary Control Commission

1st January - 31st December, 1967

1.	Crystal Spring Colony	(C-b-164)	(Rat River)
2.	Minister of Tourism	(C-b-166)	(Floodway)
3.	R.M. Pembina (Village of Darlingford)	(C-b-160)	(Shannon Creek)
4.	Village of Napinka	(C-b-161)	(Souris River)
5.	International Nickel Company	(C-b-165)	(Upper Oswagan L.)
6.	Town of Rapid City	(C-b-157)	(Minnedosa River)
7.	R.E. Schuerbeke	(C-b-149)	(Red River)
8.	Town of Dauphin (amended)	(C-b- 77)	(Vermilion River)
9.	R.M. Victoria (Village of Holland)	(C-b-153)	(Cypress River)
10.	Village of Plum Coulee	(C-b-175)	(Plum River)
11.	Village of Wawanesa	(C-b-154)	(Souris River)
12.	Town of Boissevain	(C-b-123)	(Cherry Creek)
13.	Ukrainian People's Home (Fork River)	(C-b-187)	(Fork River)
14.	R.M. Shoal Lake (Village of Oakburn)	(C-b-188)	(Oak River)
15.	Dryden Chemicals Ltd.	(C-b-184)	(Assiniboine River)
16.	R.M. Silver Creek (Village of Angusville)	(C-b-185)	(undefined water)
17.	R.M. Harrison (Village of Sandy Lake)	(C-b-183)	(Beauford Lake)

HEALTH EDUCATION SERVICES

Educational resources in Manitoba concerning public health are provided through Health Education Services, a branch of the Public Health Services Division. Through this section, printed materials, public health films, audio-visual equipment, nutrition consulting services and general health education consulting services are made available on request through local health units or directly to allied agencies and the general public.

Also, through six field Education Specialists in public health based in local health units, the public health team of doctors, nurses, and inspectors, is provided personal assistance with respect to education, in program development and community and school liaison.

Activities involving Health Education Services in 1967 included the usual range of routine services such as province-wide distribution of publications, posters, leaflets and films and the development and implementation of several major projects. These projects covered such areas as school health curriculum revision, water safety, child safety, teacher training, production of school broadcast material and development of programs in family life education with community groups and schools.

Detailed Activities on Specific Projects

School Health Curriculum Revision

Five years of intensive work on revision of Manitoba's school health curriculum by health and education representatives brought this work to near-completion in 1967:

Since the inception of this revision committee, revised programs for specific grades were introduced into the school system on completion. The initial outcome of the committee's efforts -- a new program for Grades I to VI went into effect in 1965. Grade VII was completed by 1966 and a new Grade VIII health program was introduced in the fall of 1967. Although major work on the Grade IX health curriculum was completed in 1967, further revision is still underway and this revised program will go into effect in the fall of 1968 thus completing revision of the official school health program for Manitoba. Past Grade IX, health is being integrated with guidance, science and other related subjects.

This revised health curriculum has been designed to teach students sound health habits and positive attitudes towards community and personal health. The program logically

evolves through instruction concerning personal health habits, elementary mental health, home and pedestrian safety and social relationships, to specialized units on smoking and health, nutrition, body systems, problems of adolescence, community health services, alcohol and narcotics.

This revised program has been geared to the student's developing maturity and contains material designed to help the teacher to adjust programs to needs and interests of the pupils.

Manitoba's health curriculum revision committee, which includes four representatives from Health Education Services will continue to meet on a regular basis to implement further changes in the school curriculum as required.

Summer-School Courses

In Health Education

As in past years, Health Education Services in cooperation with the Department of Education, offered a four-week summer-school course in public health education for elementary school teachers leading to three credits for a permanent teaching certificate.

Enrollment of 37 teachers in 1967 was on a par with the previous year and nearly double that of years prior to 1966. Designed to provide general background information on major areas of public health with emphasis on teaching techniques, this program drew teachers from rural areas at a ratio of almost two to one in relation to urban areas.

Alcohol Education

Since 1964 the department, through Health Education Services has carried out a province-wide alcohol education program through all

media -- daily and weekly press, publications, billboards, bus cards, radio and television. Late in 1967, efforts were re-directed with respect to production of educational material to directly involve all agencies in the alcohol field in Manitoba in this program. Agencies concerned include the Alcoholism Foundation of Manitoba, the Salvation Army Harbour Light Centre, the Alcohol Education Services of Manitoba and the department's Health Education Branch.

Working in close harmony in a team approach to the total alcohol picture, this group is currently developing an educational-advertising alcohol package scheduled to go into effect in the coming fiscal year.

In 1967, work in the alcohol education field was further strengthened through the production of a half-hour alcohol education television show in cooperation with the School Broadcast branch of the Department of Education and the Canadian Broadcasting Corporation. This program was directed toward the high school level and channelled to over 90 per cent of the high school population of the province through facilities of the Canadian Broadcasting Corporation. This program involved representatives from the medical profession, alcoholism rehabilitation agencies, correctional institutions and high school student population including two young recovered alcoholics -- a boy and girl. Intent of the program was to provide factual information on alcohol to assist students in making responsible decisions as to whether or not they will use or abstain from the use of alcoholic beverages. Assistance from the Director of the Alcoholism Foundation of Manitoba in the production of this material contributed significantly to the success of the program.

During the year Professor Robert N. Hallstead, who has served as consultant in alcohol education to the Department, passed away.

Multiphasic Screening

Program in Western Manitoba

The department's Health Educator based in the Neepawa Health Unit played a key role in the organization of a one-week multiphasic screening project held in the Alonsa-Amaranth area in September of 1967.

This health screening program, operated under the direction of the Neepawa Health Unit Medical Director, was designed to uncover disability and chronic disorders in the general population of the area of those over 21 years of age. Some 644 adults or 64 per cent of the population in the area received medical examinations. Examinations included height and weight measurements, blood pressure, heart checks, general eye examinations and glaucoma tests, urinalyses, blood tests and a cervical cancer test for women.

Preliminary findings yielded three diabetics, 60 high blood sugar cases, a possible cancer condition, four cases of glaucoma and scores of less serious ailments.

Although this screening program was never intended to serve as a substitute for a complete physical examination, it did indicate hidden chronic illness and was considered an important educational project in that it pointed out to the community the necessity of routine, regular physical examinations.

Water Safety

Increasing concern over water fatalities in Manitoba (65 in 1967 and 60 in 1966), has led to direct involvement of Department

Enrollment in the Manitoba School for the Deaf now totals approximately 130 boys and girls ranging in age from six to 19 years. This enrollment includes 78 day students from the Metropolitan Winnipeg area and 52 resident students.

Canadian Committee
on Children and Youth

Due to the diverse nature and broad scope covered by the activities of the Manitoba Division of the Canadian Committee on Children and Youth, several representatives from the public health field have logically played an active role in the development of this organization.

Established in 1958, this group essentially provides a forum for the exchange of information for various disciplines concerned with children and youth, and attempts to promote better public understanding with respect to the dynamic programs for children and youth currently underway in the province.

As program Chairman for this group, the Director of Health Education Services is working closely with the executive to expand membership and develop stimulating programs for 1968. Tentatively some of these programs may cover narcotics, L.S.D., glue-sniffing, alcoholism, reading problems, communication between disciplines and future trends in education.

Smoking and Health

Substantial progress has been made in establishing educational programs of a permanent nature in Manitoba on hazards to health from cigarette smoking.

Highlights of activities on a provincial scale over the past five years includes representation from Manitoba (rural and city schools), to a National Smoking and Health Youth Conference in Ottawa followed by a Manitoba regional youth conference in Brandon involving approximately 80 high school students and public health personnel from five health units in Western Manitoba. Delegates from the national conference actively participated in this conference organized by Health Education staff.

With respect to long-term projects it is probably that our work in health curriculum revision will prove to be the most effective approach to health education in this field. Manitoba's health curriculum has now been completely revised and includes units on smoking and health at the Grade VI and Grade IX levels. The Grade VI program has been in effect in all schools in the province since 1965 and the Grade IX curriculum will go into effect in the fall of 1968. Also, early in the school year of 1967, a "Resource Guide on Smoking and Health for Canadian Teachers -- Grades V to XIII", produced by National Health and Welfare, was distributed to all schools in Manitoba. In addition, a wide range of literature on smoking and health produced by National Health and Welfare has been distributed throughout Manitoba to schools and the general public.

To further supplement the Provincial smoking program, negotiations are underway to jointly sponsor with the Department of Education and the Canadian Broadcasting Corporation, production of a half-hour educational television program on smoking and health for junior and senior high school students. Production will probably begin in 1968 and this material will be used on school broadcasts in

the school year 1968 - 69 and possibly in future years.

Some assistance with respect to smoking and health education has also been provided to the Winnipeg School Division #1 in the form of distribution of educational literature. The city school division has carried out a smoking education program for elementary (Grade VI), junior high and high schools on an annual basis for several years. This has involved distribution of material and an annual poster contest for students, held in cooperation with the Manitoba Division of the Canadian Cancer Society.

Orientation in Public Health

At the request of the School of Dental Hygiene, Health Education Services once again organized a one-day public health orientation program for students. This involved participation by dental services, the occupational health laboratory and health education staff. A similar program was also arranged over a six-week period for first year nursing students from St. Boniface hospital.

In-Service Training

Aware of the importance of periodic in-service training for staff, the department has initiated plans to provide various types of up-grading courses for all disciplines. Training programs will cover certain aspects of administration, human relations and communications for personnel in both rural and urban areas. Health Education Services has been charged with the responsibility of organizing this training and courses will be implemented in co-operation with the Department of Education, the Manitoba Institute of Management and the Adult Education Branch of the University of Manitoba. Initial planning indicates that a series will be offered

in the spring of 1968.

Educational Television Committee

Late in 1967 an Educational Television Committee was formed to study existing educational television facilities in Manitoba and advise the Department of Education on educational television production and equipment. This committee is comprised of representatives from the teaching profession, engineering profession, associations and societies concerned with educational television, various government departments and the broadcasting industry. The Director of Health Education Services represents the health department on this advisory body.

Adult Education

The Manitoba Division of the Canadian Association on Adult Education is presently devising plans to extend Adult Education training of a non-University credit nature to rural areas in Manitoba. Major educational organizations involved in this program include the University of Manitoba, the Department of Education and the Department of Agriculture. Health Education Services is providing assistance to these agencies in the production of material for distribution to the public on course content and assisting with program planning in an advisory capacity.

Field Activities

Through six education specialists strategically located in local health units throughout the Province, substantial educational support is provided to public health teams with routine services and special projects.

A brief resume of highlights of activities include:

- assistance to school authorities in the development of programs covering a wide range of subjects such as family life education, smoking, accident prevention, dental health, grooming, nutrition, food control, alcohol education, communicable diseases, and in-service training programs for teachers.
- consultant and lecture services to community groups such as service clubs, church organizations, Canadian Mental Health Association, 4-H clubs, Association for Retarded Children, Canadian Diabetic Association, Canadian Association for Adult Education, Canadian Association for Crippled Children and Adults, Indian Health Services, local Care Institutions, Canadian Committee on Children and Youth, Western Canada Farm Safety Conference, Family Planning Association of Manitoba and the Canadian Cancer Society.
- work with community groups concerning all aspects of safety - accident surveys, traffic safety, bicycle safety, child safety, farm safety and implementation of baby-sitting courses for students.
- assistance to community in development of courses for newly-weds covering sexual adjustment, child health, economics (budgeting, etc.), nutrition and factors leading to divorce.
- assistance in organization and development of courses in control of food borne diseases for food establishment operators.

Nutrition Services

General nutritional consultative services and specific nutrition programs have been provided over the past year by the Public Health Nutritionist to schools, health units, groups and individuals. This past year an attempt has been made to co-ordinate some activities with the City of Winnipeg Nutritionist and the nutritionists attached to Care Services, Hospital Commission and Medical Services -- National Health and Welfare.

Major Activities included:

1. a. Participated in a prenatal institute involving one full day of nutrition education to public health nurses from the province, city and hospital, concerned with teaching classes on pregnancy in their respective areas.
- b. Conducted several prenatal nutrition classes in health units and provided assistance in evaluation of food records submitted by the participants.
2. Devoted considerable time to the nutrition section of the Practical Nurses Program. This involved orientation of two new instructors and some revision and direction concerning the nutrition course.
3. General consultant work with Health Units and other department personnel involving:
 - staff conferences in health units with discussions on programs.
 - home visits with nurses to discuss special diets, money management and other general problems.

- through public health nurses, nutritional advice concerning weight and skin conditions to students in schools.
 - provision of information by mail to public health nurses and the general public concerning various aspects of nutrition.
 - two - 2 hour sessions to student Public Health Inspectors regarding Public Health Nutrition and how they are or can be an integral part of the program.
 - attendance at several child health clinics to provide advice on nutrition.
4. Assisted in organization of dietary institutes for Cooks in hospitals and nursing homes in three separate areas - Dauphin, Winnipeg and Brandon. Institutes ran for three days and involved menu planning, special diets, kitchen organization and sanitation. Also, a follow-up evaluation of menus submitted by the hospitals was completed. Future one day institutes are planned to involve smaller groups in selected areas of the province.
 5. Extensive attention was given to a review of Food Services at the Mental Hospitals -- in particular the Manitoba School at Portage la Prairie.
 6. Established a public health nutrition orientation program for student dietetic interns from the Winnipeg General Hospital. This one-week program provides students with the opportunity to participate in Public Health Nutrition at the City and Provincial level.

7. Acted in advisory capacity with respect to a correspondence course for Food Supervisors in a senior citizen home and in a rural hospital. This course requires the assistance of a qualified dietitian or nutritionist to act in an advisory capacity. A minimum of four to six hours per month was required to review lessons, give instruction and evaluate progress. The course is of ten months duration and is followed up by two week intra-mural session at Guelph.
8. Provided five nutrition education lectures to students at Brandon Teacher's College and Summer School Health Education Workshop.
9. Delivered a series of nutrition lectures to 2,400 students in 12 Brandon Elementary Schools at the Grade V and VI level. The same program was repeated in one elementary school in Neepawa to 80 - 90 students.
10. Approximately 24 white rat nutritional experiments were initiated by this office during the year. Some of these schools were visited by the nutritionist and programs were discussed with the teachers and the Grade V and VI students.
11. Nutrition assistance was given to two week-long Diabetic Clinics at the Selkirk Health Unit. Attendance - 1st - 20
2nd - 7

All phases of diabetes were covered and particular emphasis was put on the individual diets.
12. Delivered nutrition lectures to:
 1. Camper's Association - re Kitchen Organization and Planning.
 2. Dietetic Interns Institute.

3. Dietetic Interns Institute - Food Customs of new Canadians. Nutrition Seminar at the School of Home Economics; subject -- "Community Nutrition from Public Health View Point."

4. Red Cross Teen Age Home Nursing -- Two hour lecture with film to 12 teenagers.

13. Assistance given to Department of Welfare - regarding budgeting and special diets. Special diets costs are presently being reviewed.

14. Organized a one-week program for Nutrition Division, National Health and Welfare Nutritionists to acquaint them with activities in Manitoba.

15. Provided consultant service to the Board of the Middlechurch Home concerning plans for their proposed new nursing home unit.

DISTRIBUTION OF EDUCATIONAL MATERIAL

Publications

Printed publications distributed 286,179

Posters distributed 26,049

FILM LIBRARY

Films

No. of films processed 7,144

Total audience attendance 376,976

PREVENTIVE MEDICAL SERVICES

Preventive Medical Services, a major branch of the Health Services Division, offers a wide range of services with respect to the prevention and control of disease including the provision of treatment under certain special conditions. For administrative purposes, Preventive Medical Services is divided into three distinct bureaus.

(1) Bureau of Disease Control - administered directly by the Director of Preventive Medical Services.

(2) The Central Tuberculosis Registry - with a nursing consultant in charge. The work of this registry is closely integrated with the treatment and preventive services carried out by the Sanatorium Board of Manitoba.

(3) Bureau of Venereal Disease Control - under the direction of a physician. This section provides direct treatment services to the public in the Metropolitan Winnipeg area and administers the venereal disease program throughout the province.

I. Bureau of Disease Control

The Bureau of Disease Control is responsible for a considerable number of continuing programs. These include:

(a). Collection of Statistics re: Communicable Disease -
Table VII - Statistical Appendix

Information concerning communicable disease originates with the private physician treating the patient. Under the Disease Control Regulations, he is required to report the occurrence of all the notifiable diseases listed, to the local medical officer of health. The local medical officer of health in turn is obliged to report these within twenty-four hours to the Director of Preventive Medical Services.

From these notifications, the Bureau of Disease Control is able to provide statistics concerning the incidence of disease throughout the province. These statistics are in turn passed on to the Dominion Bureau of Statistics, where information of national significance is compiled. Finally, national statistics are passed to the World Health Organization, who maintain records of world-wide incidence of communicable diseases. This information is processed and returned down the chain so that all local health officers are aware of the situation throughout the world and are, therefore, able to plan preventive programs against any disease which might affect their community.

(b). Central Administration of Communicable Disease Control

Central Administration is responsible for exerting overall control of measures to be adopted to prevent the spread of communicable disease throughout the province. This involves guidance to local health officers concerning control measures and consultation in the interpretation of laboratory results and in the differential diagnoses of the various diseases.

(c). Epidemiology

Epidemiology differs from the general practice of medicine in that it is concerned with the effects of disease on the people as a whole (masses) rather than on the individual patient.

Routine epidemiological investigation during 1967 has dealt mainly with outbreaks of Infectious Hepatitis, Bacillary Dysentery and Diptheria and with cases of such rare diseases as Amoebic Dysentery, Infectious Encephalitis, Malaria, Psittacosis, Tetanus, Tularemia and Diphyllbothriasis.

General Communicable Disease Summary

The overall communicable disease picture in Manitoba during 1967 was a satisfactory one. Measles, mumps, and chickenpox are undoubtedly the commonest communicable diseases which occur in this province. Because of difficulties in obtaining accurate reports, no attempt has been made since 1958 to collect exact figures for the overall incidence of these three diseases. Because of the availability of a measles vaccine, attempts have been made in recent years to collect accurate information concerning the complications of measles and deaths resulting from this disease. In 1964, twelve cases of encephalitis following measles were reported. In 1965, only three were brought to our attention. During 1966, only one such case was reported, but this year there were four. It is of interest to note that during 1967 we have also received reports of five cases of post-infectious encephalitis following mumps.

The venereal diseases continue to be by far the most commonly reported of the communicable diseases. During 1967, there were 2,505 cases of gonorrhoea compared with 2,707 for the previous year, and 258 cases of syphilis were reported, compared with 192 for the previous year.

Infectious Hepatitis is a disease which usually runs in cyclical patterns every six or seven years. Last year was apparently the low point in the cycle with 341 cases but an upward trend was apparent in 1967 with 365 cases reported. This same trend has been noted in Canada as a whole and also in the U.S.A.

The diarrhoeal diseases remain prevalent. One hundred and eighteen cases of Food Poisoning for 1967 compare with 125 for 1966

and Staphylococcal intoxication has occupied a higher rank. Dysentery has been reported more often (148 in 1967 compared with 111 in 1966). Amoebic Dysentery is no longer indigenous to Manitoba but one imported case was reported. A considerable effort has once again been put into obtaining better reporting of food-borne diseases and promoting methods to control them. Proper hygienic methods of food handling and the provision of safe water supplies along with sound methods of sewage disposal should eliminate these diseases entirely.

Only one case of Brucellosis has been reported during the year. In 1966 there were two, 1965 - three, 1964 - eight, and larger numbers in previous years. Brucellosis is a disease of animals and in Manitoba particularly cattle, which formerly affected farmers, packing plant operators and persons drinking unpasteurized milk. The tremendous reduction in the incidence in humans is a reflection of the success of the Brucellosis eradication program in cattle, conducted by the Federal Department of Agriculture.

There were reports of ten cases of Diphtheria and 26 carriers during 1967. This is of the same order of magnitude as the 12 cases and 21 carriers reported during 1966 but is an improvement over 1965. Fortunately there were no Diphtheria deaths in 1967 compared with three such deaths a year earlier.

It is gratifying to be able to report no cases of paralytic poliomyelitis in 1967 compared with three cases in 1966. We all owe a debt of gratitude to Drs. Salk and Sabin for their discovery of vaccines effective in preventing this disabling disease. The results obtained by the department's immunizing program compared with the cost

of the program is one of the best modern examples of the economic as well as humanitarian benefits of a preventive medical program. Large epidemics of polio such as occurred in Manitoba in the 1950's are now only of historical interest. Nevertheless, any Manitoba resident going abroad to parts of the world where the disease is still endemic will run the risk of infection unless he has maintained his immune status thoroughly up-to-date by booster doses of Sabin Vaccine. It is also apparent that the wild polio virus may be reintroduced into this Province from elsewhere and may affect residents who are not properly immunized. There must be no let up in efforts to obtain 100 per cent coverage with Sabin Vaccine for all residents of Manitoba.

Birth Rate

During 1967 there were approximately 16,900 births with a provisional birth rate of 17.5 per 1,000. This represents yet another drop in the annual rate and is a continuation of the recent trend which has affected Canada as a whole and many other advanced countries.

Diphtheria

Diphtheria is a serious disease which generally affects the throat and produces a membrane over the tonsils, and possibly also on the voice box and in the nose. The serious effects of the disease are brought about by obstruction to breathing or by the effects of the toxin which can cause damage to the heart or paralysis of the muscles involved in breathing. This disease is entirely preventible by means of active immunization. Manitoba has had a program for immunization against diphtheria for about forty years, which has resulted in a tremendous drop in the number of cases reported. Despite all efforts, there is cause for concern with the number of cases of diphtheria and also with the number of carriers who have been reported in recent years.

In 1966 there were 12 cases with three deaths and 21 carriers and in 1965, there were twenty-six cases, with three deaths and thirty-one carriers. In 1964, there were two cases, both of whom died, and in the previous five years reports were received of anywhere from fifteen to twenty-five cases, with two to four deaths annually.

In 1967, there were 10 cases and 26 carriers reported, but fortunately no deaths. Nine of these cases formed a localized outbreak amongst Treaty Indians in the Fisher River area. The first case there occurred in September and the outbreak reached its peak in November. The community were fairly well immunized and as a result the disease was, on the whole, fairly mild. Intensive efforts were made to bring the immunization status of the area up to 100 per cent and to locate and treat all asymptomatic carriers. Eleven carriers were discovered by throat swabbing and treated, and the outbreak was brought under rapid control. The remaining Diphtheria cases were sporadic. These were an 18 month old boy diagnosed in Winnipeg and in addition delayed reports were received of two cases not previously reported with onset in 1966. One from Portage la Prairie and the other from Springfield Municipality.

Of the remaining 15 carriers, nine were reported from Portage la Prairie during April, May and June. The others were not grouped geographically. Treaty Indians and Eskimos formed an unusually high proportion of the carriers. In addition to those associated with the Fisher River outbreak there were six treaty Indians and two Eskimos Diphtheria carriers reported elsewhere.

In this group chronic ear carriers were common. Seven ear carriers were included in the reports of whom three were known to be Treaty Indians and one an Eskimo.

Scarlet Fever & Streptococcal Sore Throat

An unusually high prevalence and severity of Scarlet Fever was reported in 1966 with the first death from the disease since 1959. This trend continued into 1967 with excess numbers of cases being reported during the first three months. Thereafter the incidence fell and the year ended with fewer reports than usual and no deaths.

Infectious Hepatitis

Infectious Hepatitis is apparently entering the ascending limit of the usual six or seven year cycle and a rising incidence was noted in 1967. There were two large localized outbreaks during the year.

Cases were reported with increased frequency from the Churchill area commencing about July, 1966. This outbreak continued until March of 1967 with a total of 84 persons in the area reported as cases.

The second localized outbreak was reported from the Roseau River Indian Reserve in October, 1967, with subsequent spread to the nearby Municipalities of Franklin, Montcalm and Morris. In all, 42 cases were reported during the last three months of 1967 from this area.

The spread of Infectious Hepatitis can be diminished by the use of Gamma Globulin. This is made available free of charge by the Department for family or other intimate household contacts and was used extensively at Churchill as well as the South Eastern area of Manitoba during the outbreaks. Breaking the chain of faecal-oral spread is even more important in control. This can be accomplished by proper attention to the basic principals of hygiene and specifically by routine hand washing after visiting the toilet. This aspect of prevention was emphasized to persons connected with the outbreaks.

Bacillary Dysentery

This disease is characterized by general malaise, fever, abdominal cramps, diarrhoea with blood and mucous in the stools and tenesmus. It is spread by the faecal-oral route by direct contact or less frequently through the medium of water, food and milk. There is no reliable vaccine. Spread can be halted by attention to elementary hygiene principles. It is regretted that we have to report 97 cases compared with 67 last year. Frequency and severity are often related to poverty, overcrowding, malnutrition and ignorance. Such circumstances exist in certain parts of Northern Manitoba and it is believed that the disease is much more common than official reports indicate.

Amoebic Dysentery

Amoebic Dysentery is a chronic debilitating diarrhoeal disease due to a protozoan, the *Entamoeba histolytica*. It is no longer believed to be endemic in Manitoba but cases may be introduced from other countries from time to time. The solitary case reported September, 1967, was a nine-year old boy from the Steinbach area who had come to Canada from Mexico two years earlier and presumably brought some amoebae with him. In order to

eliminate this source of infection, the Health Officer of the Red River Health Unit arranged for suitable treatment of the case and examination of household contacts to exclude other undiagnosed cases.

Western Equine Encephalitis (Sleeping Sickness)

Western Equine Encephalitis is a disease which causes an inflammation of the brain. It is generally quite mild in nature, causing only a transient headache and stiffness of the neck followed by full recovery in the course of a few days or a week. A small percentage of cases progress to permanent brain damage. The reservoir of the Western Encephalitis virus exists in wild birds, snakes, frogs and other vertebrates and it is spread from this reservoir to horses and humans by the bite of a mosquito. In 1941, a very large epidemic occurred in Manitoba, with 521 cases and 79 deaths. Since then, only a very few human cases have been reported, although large outbreaks have occurred in horses from time to time. In recent years, quite extensive outbreaks in both humans and horses have been reported from Saskatchewan and certain parts of the United States. For the past four years, this Section has organized an epidemiological study into the incidence of this disease in the vectors, animal hosts and humans.

Results have been largely negative with the exception of the isolation of W.E.E. virus from one pool of culex tarsalis mosquitoes trapped in the Delta area during the summer of 1966.

During 1967 only two human cases of Western Equine Encephalitis were reported in Manitoba. Neither was really typical of the disease clinically and the diagnosis was based on laboratory findings which might be misleading. The disease in horses was also

infrequent during 1967. As a result a research epidemiological project has been devised, designed to indicate whether or not the disease has been endemic or epidemic in humans in Manitoba since 1941. This is being done by testing the antibody level in human serum submitted to the laboratory for other purposes (premarital tests for syphilis). Specimens are selected from census tracts and by age groups in such a way as to enable researchers to compare the situation in different areas and to compare results on those exposed to the 1941 epidemic with those born subsequently. To date about 300 samples have been tested and positive results are running at about 5 percent. Otherwise it is too soon to draw any reliable conclusions and the program will continue during 1968.

Tetanus

Tetanus is a rare disease in Manitoba. It is due to the contamination of a wound with the tetanus spores which are to be found in soil all over the province but particularly in land which has been cultivated. The toxin produced by the tetanus germ affects the nerves and causes violent spasms, and death from paralysis of the breathing muscles and the heart. It can be entirely prevented by previous immunization with tetanus toxoid, and the risk can be minimized by the proper surgical treatment of wounds, the use of antibiotics, and of tetanus antitoxin at the time of any tetanus prone injury. Occasional cases of tetanus continue to be reported in Manitoba. In 1961, there were two cases, with one death. In 1964, there were three cases with two deaths. In 1966 one fatal case was reported.

In 1967, two cases were reported, one of which was fatal. On August 23 a 56 year old male from Carman sustained a jagged star-

shaped punctured wound of the face from the stump of a tree. Two days later spasm of the muscles of mastication and "lock jaw" developed. He did not seek medical attention until shortly before he died on August 30, and had never been immunized.

On October 3 a 43 year old Winnipeg man sliced off a piece of his thumb on a sausage machine. Emergency treatment including tetanus antitoxin was given at a large Metro hospital. Nevertheless he developed tetanus on October 15. Intensive care in a large metro hospital resulted in complete recovery.

These cases illustrate the need for a continuing program in adults as well as children to immunize against tetanus.

Psittacosis:

Psittacosis is a disease of birds which may affect man, producing an illness resembling a pneumonia or a prolonged fever. It is comparatively rare in Manitoba. Two cases were reported in 1967. A 33 year old Westbourne man was reported on May 26. The history revealed contact with a budgie which had died in January. A second budgie in the house was dealt with by the Medical Director of the Neepawa Health Unit.

A 40 year old female from Winnipeg became ill in July. A retrospective diagnosis of psittacosis was subsequently made as the results of convalescent antibody titrations at the Virus Laboratory. Investigation by the City of Winnipeg Health Department brought to light the occurrence of several other cases of obscure illness amongst the neighbours of the diagnosed case. A pigeon fancier in the immediate neighborhood was discovered. However, inspection revealed the birds to be well cared for and apparently healthy. A laboratory

diagnosis of psittacosis could not be made on pigeons submitted to them for examination. The source of the case or outbreak remains uncertain.

Malaria

Malaria is a feverish illness of tropical and sub-tropical areas due to a protozoon and spread by mosquitoes. It is not indigenous to Manitoba. One case was reported in 1966. In 1967, two cases, both believed to be imported, were reported.

On June 9 a 30 year old post-graduate student at the University of Manitoba was reported as a malaria case due to Plasmodium Vivax. He had had his initial attack in August, 1966, in Pakistan, and arrived in Canada September, 1966.

In September a 44 year old man from Hamiota was reported as a Malaria case. He had had the disease first of all whilst abroad during World War II and had had several relapses of Benign Tertian Malaria since then.

Although malaria may spread in certain parts of the United States, it is very unlikely to do so in this Province because of climatic and other ecological factors.

Tularaemia

Tularaemia is a serious infectious disease of wild animals and man with fever, swollen glands, ulceration and a case fatality rate of 5 per cent. It is seldom reported in Manitoba.

In man infection usually results from handling infected animals or through the bite of an insect vector.

One case was reported in 1967. He was a male Treaty Indian from The Pas Reserve who became ill June 14. The disease was apparently acquired whilst skinning Muskrats.

Diphyllobothriasis (Fish Tapeworm)

Infestation with fish tapeworm may produce no symptoms at all or may cause general debility. In a few instances a severe anaemia may be caused. One stage of the life cycle of the worm is spent in fresh water fish and the other in animals such as dogs, bears, man. Man may be infected by eating uncooked fish. The disease is not officially reportable. Nevertheless, a case of fish tapeworm disease was reported in a seven year old female from Brochet in June. Records show that infected fish and dogs were by no means uncommon 30 years ago in Manitoba. Enquiries by the Director, Northern Health Services, have indicated that this disease is still by no means unknown amongst fish, dogs and humans in that area. Steps have been taken in selected areas to educate the public in ways to eradicate this disease by properly cooking fish and deworming dogs.

Mumps

Reports of single cases of this common endemic disease are not required. Unusually large outbreaks are, however, noted. During November,-December, 1967, outbreaks were reported from many areas including Assiniboia, Bissett, Dauphin, Fisher Branch, St. James and the City of Winnipeg.

IMMUNOLOGY

There are two quite distinct aspects of this program. In the first place, the Medical Officers of the Section must keep themselves thoroughly familiar with developments of new immunizing agents and changing practices in the use of older agents throughout the world. They are then in a position to provide guidance on proper methods of immunizing to others in the medical and public health field.

Secondly, the section acts as a centre for the wholesale distribution of free biologics to health units and practicing physicians. The section is responsible for drawing up and periodically revising routine schedules of immunization. These schedules are used in all health units throughout the Province, as well as in the City of Winnipeg Health Department, so that a uniform procedure is adopted. Generally speaking, this section has continued their efforts to promote the widespread use of immunizing agents which will protect against Diptheria, Whooping Cough, Poliomyelitis, Tetanus, Smallpox and Measles.

Smallpox Vaccine

Routine revaccination against smallpox is no longer advised for school children. Such children, however, will continue to receive a primary smallpox vaccination if they have not already had one. This policy is recommended because it is felt that the risk of complication from routine and uncontrolled smallpox revaccination was greater than the risk, in Canada at the present time, of contracting the disease. Smallpox is no longer indigenous in Canada and its introduction is minimized by medical examination of immigrants at points of entry and by surveillance for 14 days, of all persons coming from areas where the disease is still endemic. Primary vaccination against smallpox of all children at the age of 12-24 months is still strongly recommended. Emphasis is being given to ensuring revaccination of those groups who are of special high risk. These include among others, hospital and health personnel, international travellers and persons frequently present at ports of entry, such as taxi drivers, porters, and so on. The harmful side effects of smallpox vaccination can be to a considerable extent avoided if the vaccine is not given, or is delayed in

those groups in whom it is known to be particularly risky. This includes children with skin disease or those who have brothers or sisters at home with open sores on their skin. It also includes generally those people who are not in good health and pregnant women.

Polio Vaccine

During 1967, Sabin Live Oral Poliomyelitis vaccine has been increasingly used in accordance with departmental recommendations (see Table I, Statistical Appendix). This Sabin vaccine has one advantage over the Salk vaccine which was formerly used in that it not only protects the individual immunized, but also prevents him from acting as a carrier of the Polio virus, and thus protects the community. The very rare complications which might arise if Sabin vaccine were used alone in older people is eliminated by a schedule which judiciously combines Salk vaccine for the initial shots with Sabin vaccine to complete the series. Sabin vaccine can safely be used on a year-round basis and its use need no longer be discontinued during the summer months.

Cholera Vaccine

Cholera vaccine was added to the free list of biologics distributed in Manitoba in the latter part of 1966. Although cholera has not occurred in Canada for many years, vaccination against the disease is required for travellers proceeding to other parts of the world where the disease still exists, and may also be required of Canadians and others returning to Canada from these infected areas.

Measles Vaccines

A controlled study of further attenuated measles vaccine was conducted by the Dauphin Health Unit during 1966 with very satisfactory results.

Manitoba also took part in a nation-wide trial of Connaught killed Measles Vaccine alone and combined with Diptheria and Tetanus Toxoids and Pertussis and Polio Vaccines during 1966 and 1967. It was decided that Schwarz further attenuated measles vaccine (Lirugen) most closely matched Manitoba's needs. This vaccine was therefore added to the free list on April 7, 1967. Requests for supplies have exceeded expectations and 30,263 doses have been used in the nine months since it was made available. Lirugen is recommended for all children at nine months of age or as soon as possible thereafter, and in the initial few years following its introduction, for children up to school entry who have not had measles. It is believed that immunity after one injection will be life-long. This should result in a rapid reduction in the incidence of measles and possibly its eradication in Manitoba in five or six years.

Tetanus Antitoxin

For many years Tetanus Antitoxin derived from horses was routinely used as a preventive measure for persons who had sustained an injury which might be followed by Tetanus. The administration of horse serum itself carries risks of harmful effects in a small group of people and this risk increases if horse serum has to be repeated on a later occasion. Because of these risks, recent work has cast doubt on the practice of giving equine antitetanic serum and it has been suggested that the best treatment is to thoroughly clean the wound and treat the patient with an antibiotic. There is no doubt that the method of choice in preventing Tetanus is by prior use of active immunization with tetanus toxoid on a community wide basis, with booster doses at the time of injury. It has become departmental

policy to promote this type of active immunization, rather than the use of equine antitetanic serum. Nevertheless, certain persons present themselves after receiving a tetanus prone injury, who have no history of ever having had active immunization with the toxoid, and it is felt that in this group, despite the risks involved, the use of equine tetanus antitoxin is mandatory. Tetanus Antitoxin derived from human volunteers does not have the disadvantages of the equine product. Supplies of human antitoxin have become increasingly available during the year. Table I, Statistical Appendix shows a considerable increase in the use of Tetanus Toxoid, some reduction in the demand for equine antitoxin and an increase in the demand for human antitoxin in line with the changing patterns of treatment outlined above.

Immune Serum Globulin

Immune Serum Globulin continues to be supplied free by the Section for the prevention of Infectious Hepatitis in family and household contacts to this disease and also in pregnant women during the first trimester of pregnancy, who are exposed to German Measles. It is also used from time to time for special purposes in preventing other diseases in particularly susceptible persons, at the discretion of the Director. The Red Cross Society continues to supply the Gamma Globulin required for treatment purposes and hyper-immune Globulin where these are required.

Recent changes in policy in the light of more recent knowledge have doubled the recommended dose of Gamma Globulin for the prevention of German Measles from 0.1 to 0.2 ml. per pound of body weight.

The amount of Gamma Globulin used this year (shown in

Table I-Statistical Appendix) of 7,707 c.c.'s is little different to last year's 7,632 c.c.'s. However, an increased incidence of Hepatitis and higher dosage requirements for German Measles could be indicators of higher needs for 1968.

Rabies Vaccine

Rabies vaccine and antiserum are made available to persons who have been bitten by animals which are suspected of having Rabies. During 1967, 60 persons were treated with Rabies Vaccine and 21 vials of Rabies Antiserum were distributed. In six of these cases the animal was definitely proved to be rabid and generally speaking in the remainder, the bite was by an animal which got away and was lost and could therefore not be tested. Once again no human cases of Rabies were reported in the province. The number of confirmed cases of rabid animals during the year totalled 35. The types of animal involved is shown in Table VI - Statistical Appendix.

Typhoid and Paratyphoid Antigens

The vaccines containing Typhoid and Paratyphoid Antigens are not given as part of the routine immunization programs in this province. They are, however, made available to persons going abroad where these infections are more common and they are sometimes used locally in the event of a case or outbreak of Typhoid or Paratyphoid Fever.

Yellow Fever Vaccine

Yellow Fever Vaccine is not provided by the Provincial Government but is made available free of charge to travellers at a special clinic operated by the Federal Government Immigration Medical Services.

Foreign Travel

The Disease Control Bureau maintains accurate and up-to-date information about immunization requirements for foreign travel. They act as a centre for the distribution of the official international vaccination certificate booklets. These booklets may be officially stamped by the Section or by any of the Local Health Units to authenticate the vaccination in a manner which is acceptable to foreign immigration authorities. Last year, an agreement was reached to amend the International Sanitary Regulations and a revised form of International Certificate of Vaccination against Smallpox was adopted, and the use of this form became mandatory on January 1, 1967. The new certificate requires that the origin (manufacturer) and batch number of the vaccine used be recorded. It also includes in the text a statement that the vaccine is "certified to fulfill the recommended requirements of the World Health Organization". Supplies of the revised booklets have been distributed to all Health Units and to practicing physicians. A standardized official stamp has been supplied to all Health Units and registered with the Federal Immigration Health Service.

The Prevention of Ophthalmia Neonatorum

Infection of the eyes of infants during the process of birth by the gonorrhoea germ or by other related organisms, may give rise to inflammation and possibly blindness. This condition in newborn infants is known as ophthalmia neonatorum. To prevent this disease, the Section provides free silver nitrate drops which are instilled into the infant's eyes as soon as possible after birth. This is an effective treatment but in some ways proves irritating to the infant's

eyes. In recent years, antibiotic drops have proven equally effective and less of an irritant. The amount of silver nitrate supplied for this purpose therefore does not equal the number of births occurring in the province each year. Nowadays a high percentage of births take place in hospital and most patients are insured by the Manitoba Hospital Commission. It would seem appropriate therefore to transfer responsibility for preventing Ophthalmia Neonatorum to hospital authorities. Preventive Medical Services will therefore vacate this field in 1968 and Silver Nitrate will no longer be supplied.

Prevention of Heart Disease due to Rheumatic Fever

Repeated attacks of rheumatic fever are known to carry an increasing risk of causing heart disease. Attacks of rheumatic fever are related to a preceding infection, generally of the throat, due to a germ known as the hemolytic streptococcus. These infections can be prevented by the continuous administration of an antibiotic or chemotherapeutic agent. Preventive Medical Services makes oral penicillin, sulfa tablets, or erythromycin, as well as a preparation of a long acting injectable penicillin, available free for this purpose. Applications from family physicians to have their patients placed on the Rheumatic Fever registry are carefully scrutinized by an expert committee to ensure accuracy of diagnosis. This program has been in existence since 1958. Formerly the cost of the drugs was shared equally between the province and the municipality in which the patient had legal residence. However, in 1965, the province assumed the total cost of the drugs.

In Health Unit areas, these drugs are supplied in bulk at three-month intervals for patients on the Rheumatic Fever Registry.

In non-Health Unit areas the patients' supply continues to be sent from Preventive Medical Services, on an individual basis. Distribution of drugs through the Health Units enables the health unit staff to exert a closer supervision over the patient and ensures that the Prophylactic treatment is carried out regularly and in accordance with the physician's instructions.

Applications for benefit under this program are being received at the rate of approximately 150 every year. Patients actually receiving prophylactic drugs now total 1,264 as compared with 1,308 at the end of last year. Table III-Statistical Appendix shows the number of patients accepted under the program this year, as compared with last, and also the quantities of each type of drug distributed.

Traffic Accident Prevention

Preventive Medical Services continues to act as a medical referee for the Motor Vehicles Branch. A physician interprets medical reports or may examine the patient so that he can decide whether or not a person is fit to drive. The Accident Prevention Committee of the Manitoba Medical Association is used in cases where there is a difference of medical opinion or where reaching a decision is particularly difficult. During 1967, 16 cases were referred to this Section. In seven of these it was possible to advise that a driving license could be issued, possibly with some restrictions in some cases. In three instances, the applicant was considered totally unfit on medical grounds to drive a motor vehicle. Six applications are pending as of December 31.

Treatment of Diabetes

Anti-diabetic drugs are made available free to patients where the municipality of legal residence or the Welfare Department

certifies that they are unable to purchase the drugs out of their own resources. The cost is shared on a fifty-fifty basis between the province and the municipality. Patients eligible for Medicare are excluded, since they are entirely a Welfare Department responsibility. Drugs are supplied in accordance with the prescription of the legally qualified physician in attendance. All the injectable insulins are made available, as well as the newer hypoglycaemic agents taken by mouth.

With the introduction of Social Allowances Medicare, the numbers of patients benefitting under this scheme showed a considerable reduction because many of the older patients can now receive their drugs free under the Medicare scheme. Nevertheless, during the past three years, the number of persons taking advantage of this service has again increased and this year the increase has been quite considerable. Currently, there are 859 patients registered for free anti-diabetic drugs, as compared with 757 last year. Table II-Statistical Appendix gives details of the type and quantity of anti-diabetic drugs supplied during 1967.

Special Drugs of a Life-Saving Nature

This program has gradually developed since 1958. Arrangements made under this program provide for the supply of free drugs when these are required as a life saving measure and as a long-term continuing necessity extending over months or years and where there is financial need. The financial need is assessed on the basis of a statement by the Municipal authorities that the patient is unable to bear the cost of the drugs without creating undue hardship and that the municipality itself will be prepared to contribute fifty percent of the cost. The medical need is assessed on the basis of a certificate

from the attending physician, usually supported by a report from a recognized specialist in the appropriate field.

One of the large groups of patients assisted under this scheme consists of children suffering from Cystic Fibrosis. These cases have increased from 42 in 1966 to 49 in 1967. Drugs for Cystic Fibrosis patients are supplied through the Pharmacy at the Children's Hospital and the total cost is borne by the province.

Another group are those infants found to be suffering from aminoacidopathies. The cost of special diets required for the treatment of this type of patient is fully recoverable from the Federal Government. The aminoacidopathies consist of a group of rare diseases due to an inborn error of metabolism. Unless they are properly managed and treated, many infants who are born with this type of defect become increasingly mentally deficient and have to be admitted to mental institutions for life. These diseases can be prevented only if they are diagnosed at a very early stage and if the infant is provided with a special form of food stuff which is low in the elements which they cannot metabolize and the accumulation of which gives rise to injury to the brain and mental deficiency. The best known of these diseases is phenylketonuria. There are approximately 29 phenylketonuric cases in Manitoba, of whom half are in mental institutions, beyond the reach of treatment. Of those remaining at home, 10 are being provided with Lofenalac, the special food used to prevent the development of mental deficiency in such cases.

Seven additional patients in a mental institution are being supplied with Lofenalac in the hope that this will make them more manageable and may cause some slight improvement in their mental condition.

In 1965, use of the Guthrie Screening Test for phenylketonuria on all newborn infants on the fourth day of life was found to be a practical procedure and arrangements were made for province-wide coverage of all infants born in hospital. Test kits have been supplied to all the hospitals in the province which undertake maternity work. The actual tests themselves are carried out at the Fred T. Cadham Provincial Public Health Laboratory.

In the summer of 1967, screening for multiple aminoacidopathies was commenced utilizing the paper chromatography technique, as well as screening for galactosalmia. Table IV Statistical Appendix gives details of the number of tests carried out. In 1967, 95 percent of newborn infants were tested. One phenylketonuric case was discovered and a second case of P.K.U. in an older child confirmed by the Guthrie tests. The chromatographic studies yielded fairly large numbers of suspicious results for tyrosine, hyperglycaemia, hypoglycaemia, high fructose, isoleucine, valine, proline, alanine and lactose. In nearly all cases these suspicions proved to be unfounded or the abnormality of no significance.

The yield then has been small but it is probable that one phenylketonuric case and another confirmed does justify the effort and expense involved. This is an epidemiological research project paid for out of a Federal Health Research Grant and further investigation is needed to prove its value.

Other types of patients receiving life saving drugs are indicated in Table V-Statistical Appendix and forty-eight new patients were accepted during 1967, so that 157 are now receiving assistance. Thirty-two applications were rejected and nine were still being

processed on December 31. It is perhaps of current interest that two of the 1967 admissions were organ transplants (kidney).

Pilot Multiple Screening Project in Adults

During 1967, Preventive Medical Services prepared protocols for a pilot multiple screening project for the detection of obesity, diabetes, hypertension, anaemia, glaucoma, cervical carcinoma and Syphilis in adults in a health unit area. The project was planned to be carried out in two stages with all subjects receiving certain routine tests during stage one and subjects selected by age, sex, weight, etc., proceeding to stage two for specific tests only appropriate to those selected. The project was carried out in the Neepawa Health Unit area by a team of physicians, nurses and technicians, headed by the Medical Director of the Neepawa Health Unit. The project proved practical and interesting and the results will be published elsewhere. The project was supported by a Federal Health Research Grant.

Transportation and Funerals

Under this program the section makes arrangements for, and pays the cost of transportation of patients from one hospital to another, if the patient is indigent and does not have legal residence in any organized municipality in Manitoba. Arrangements are also made, and transportation costs paid, for the return home of patients after hospital treatment. Finally, funeral expenses are paid for the type of patient described, as required.

During 1967, 711 patients were provided with transportation or board and lodgings at a cost of \$7,255.61 and nine funerals were paid for at a cost of \$1,395.00. Details are shown on Table IX-Statistical Appendix.

A very similar program exists for the payment of transportation costs and in some instances lodging allowances for patients suffering from tuberculosis who are a provincial responsibility. Details are shown in Table IX-Statistical Appendix. The volume of work carried out under these programs and the cost of the programs has increased considerably in recent years. This is due largely to an increased demand for transportation from the Northern part of Manitoba to the Winnipeg area, where special medical facilities are available.

Occupational Health

The medical consultation services provided by this section and the Industrial Hygiene Services provided by the Section of Environmental Sanitation are so closely intertwined that they are operated as a joint program. Under the Silicosis Control Program, this section provides a physician for the examination of hardrock miners, foundry workers, etc., to carry out the physical examination. The X-Ray films are reported on in this office which is given the responsibility of advising the Minister whether or not a subsisting license should be issued. In some of the larger mines, it has become necessary to delegate some of these duties to medical personnel on the spot. Of the 6,653 licenses issued, about 1500 physical examinations are carried out by departmental medical staff. Of the 6,653 X-Rays taken, 4,862 were reported by medical staff in this section and in the remainder, the Radiologist's report was scrutinized and in those where the report was suspicious, the X-Ray films were further examined and classified in this office.

The results of chemical tests carried out in the Environmental Health Laboratory are carefully reviewed by a physician in this

section and are used as an index to the initiation of action to prevent industrial disease. A continuing program is in operation to control lead poisoning in battery plants and founderies.

Reports of claims for compensation submitted to the Workmen's Compensation Board are also reviewed in this section and serve as an epidemiological tool, indicating where unsatisfactory conditions in a factory or workshop require investigation and remedial action.

Prevention of hazards to health arising out of the use of ionizing radiation remains largely a Federal responsibility. However, this section provides a physician to act as Radiation Health Officer for the province. He is a member of a team formed to take action in the event of a radiation accident or emergency. During 1967 some of the problems encountered were:

- * A lost radioactive source at Fort Churchill Hospital.
- * Radiation hazards from colour T.V. Sets.
- * Radiation hazards from unexplained flying objects.
- * Alleged hazards to health of humans, animals, birds and vegetation from Microwave towers.
- * Alleged hazards to personnel from inadequate protective clothing whilst operating a diagnostic X-Ray machine.

Cancer

The activities of this section with regard to cancer control are limited to the collection of statistics of the incidence of this disease throughout the province. The collected reports of cancer cases are passed on to the Statistician of the Manitoba Cancer Treatment and Research Foundation, where the data is further processed along with other information which is at the disposal of the

Foundation. A separate annual report is issued by the Manitoba Cancer Treatment and Research Foundation.

Tuberculosis Control

This section has responsibility for the administration of the Inter-Provincial agreements for the care of patients suffering from tuberculosis. The number of patients involved, rate per day, as well as the days accrued by them, and monies received and paid in this connection are shown in Table VIII-Statistical Appendix.

The activities of the Central Tuberculosis Registry are reported by the registrar later in this report. The responsibility for the treatment of patients, and activities designed to prevent tuberculosis, have been delegated to the Sanatorium Board of Manitoba.

THE CENTRAL TUBERCULOSIS REGISTRY

The Registry was opened in 1937 to fulfill the need for a central office from which information would be available on all known cases of tuberculosis in Manitoba.

The staff consists of the Tuberculosis Nursing Consultant and two stenographers employed by the government and two stenographers employed by the Sanatorium Board.

The office is located in the Central Tuberculosis Clinic, in the Manitoba Rehabilitation Hospital. Because of the close proximity to the offices of the Sanatorium Board, Chief of Medical Services, the Registry receives continuous guidance in maintaining an adequate service to the Provincial Director of Preventive Medical Services.

From information collected, statistical reports are compiled at the end of each year for the Provincial Department of Health, the Dominion Bureau of Statistics and for the medical staff of the Sanatorium Board. The Registry has been referred to as the medical accounting department within the tuberculosis control program.

Sources of Information

- (1) Notification of tuberculosis as a communicable disease, as reported by practising physicians to the Department of Health or directly to the Registry.
- (2) Reports of all admissions and discharges from Sanatorium during the month.
- (3) Reports of admissions to all Manitoba Hospitals for tuberculosis.
- (4) Interim reports on all patients in Sanatorium.
- (5) Reports on patients and contacts examined at the out-patient department of the Central Tuberculosis Clinic, Winnipeg; the Manitoba Sanatorium, Ninette; the Assiniboine Hospital, Brandon, and the Northern Tuberculosis Unit, The Pas. (Stationary Clinics).
- (6) Reports on all Travelling Tuberculosis Consultant Clinics held within the Province.
- (7) Reports on all Tuberculosis Surveys held within Province.
- (8) Reports of abnormal findings in hospital admission chest x-ray films.
- (9) Reports from the Division of Vital Statistics of all deaths from tuberculosis.
- (10) Reports from the Fred T. Cadham Public Health laboratory on specimens found positive for acid-fast bacilli.
- (11) Reports from the Local Health Units.

The information recorded in the Registry is used by the Sanatorium Board as a guide in planning an effective tuberculosis control program.

For each case of tuberculosis, whether disease is active or inactive, the Registry maintains a "Kardex Card" on which is recorded all pertinent identifying information plus the diagnosis and recommendation. On this card is recorded the findings at each subsequent examination.

If a person is admitted to Sanatorium there will also be a "Separation Card". On this card is recorded information regarding treatment and length of stay in Sanatorium.

A current Master Kardex file is maintained with the cards of all persons requiring medical and nursing supervision. At present, there are approximately 8000 cards in this Master File. Cards for Whites, Treaty Indians and Eskimos are included.

The Registry also maintains:

- (1) Bound volumes of reports on Surveys and Travelling Clinics dated back to 1926.
- (2) An Inactive File containing Kardex Cards on persons not requiring close supervision.
- (3) A Registry on all persons known to have a positive reaction to the tuberculin test.
- (4) A Registry on all persons known to have received a B.C.G. vaccination.

Tuberculosis, as a cause of death, is much less common than it was 20 years ago. During 1967 the provisional specific mortality rate for Tuberculosis in Manitoba was 2.8 per 100,000 population. Last year the rate was 2.6 per 100,000. After the precipitous fall that took place, the rate seems to have reached a plateau at about this level and this indicates that the problem is by no means solved and even more strenuous efforts are required to finally eradicate the disease. The annual incidence rate for 1967 at 20.2 per 100,000 is compared with last year's rate of 21.4. Incidence has been falling more slowly than mortality which means that patients are living longer. The age groups affected have altered somewhat in recent years. In females there is still a preponderance of young women in their teens and twenties and there has been a relative increase in the number of older men affected. These men probably represent a breakdown of

disease acquired earlier in life and may be an indication of the greater "stress" to which middle aged and elderly males are subjected. Elderly males (or females) are often tardy in seeking medical attention and diagnosis may be delayed on this account. In the meantime they act as a reservoir of infection to their families and to the community.

The Registry is responsible for the adequate "follow up" supervision of patients, contacts and others requiring further investigation. Family records are made up from information and advice obtained from the Sanatorium Board. These records contain a roster sheet with family identifying data and also information as to the family environment. The record also contains a medical history sheet for each member of the family with date and place of examination and a summary of each review, with medical recommendations. Treaty Indians and Eskimos are forming an increasing proportion of recorded cases. With the increase in domiciliary treatment, the Registry is assuming an increased role in the supervision of domiciliary chemotherapy. Information is supplied to local health units which enables them to function in their role of supplying direct nursing supervision to the patient and his contacts. There is a constant interchange of information between the Registry on the one hand and Health Units, the City of Winnipeg Health Department and National Medical Services (who supervise Treaty Indians and Eskimos) on the other.

The incidence of reactivation of disease is the concern of all who are striving towards the eradication of this disease. Greater effort is made now to maintain closer supervision of all ex-patients. These persons are contacted and encouraged to have annual medical reviews.

There has been a lessening of case-finding activities in low-incidence and non-productive areas of the province. Whilst the program no longer attempts to cover the whole province at short intervals, surveys and clinics are planned to cover more frequently those areas where the number of new cases and the number exposed to infection is the highest. Greater effort is needed to overcome the complacency of the public in availing themselves of the facilities offered.

In the past four years, close watch has been maintained over persons who have a 3+ or a 4+ reaction to the tuberculin test. These persons are encouraged to have a chest x-ray annually--more frequently if symptoms are apparent.

The trend today is towards discharging patients from Sanatorium earlier, to complete treatment at home. Approximately one-third of the treatment time is now spent in Sanatorium and two-thirds at home where the patient continues on a modified rest routine and also continues on anti-tuberculosis drugs. To the persons supervising patients at home falls a great responsibility, as drug therapy to be effective must be continuous. Supervision includes guidance and encouragement to complete the full period of prescribed drug therapy.

B.C.G. Vaccine continues to be employed in areas of high incidence. Several areas of the Dauphin Health Unit fall into this category as well as parts of the Selkirk and Stonewall Units. All Indians and Eskimos are considered priority groups for B.C.G. and vaccination is recommended at an early age. Family contacts are also prime candidates for B.C.G. vaccine. It is hoped the freeze-dried vaccine now being used will prove more effective than earlier vaccines

and standardization of the tuberculin testing with 10 I.T.U. P.P.D. should produce more uniform and accurate results.

The tuberculin positivity rate in the 14 year age group is still 3 to 4 times the Recommended World Health Organization Standard of control i.e. 1%. This indicates that there are still too many foci of infection in our midst.

In summary the death rate from tuberculosis has fallen dramatically. The incidence rate has not fallen to nearly the same extent. Smouldering embers of infection still exist throughout Manitoba, ready to burst into flame if we slacken our efforts before the raging fire of tuberculosis is finally eradicated.

Tables X - XIV - Statistical Appendix provide the statistical information on which this commentary on the work of the Registry and the Tuberculosis situation in Manitoba in 1967 is based.

VENEREAL DISEASE CONTROL

The venereal disease control program in Manitoba is geared to prevent the spread of venereal diseases. Basically this is accomplished through administration of the regulations under the Public Health Act, requiring physicians to notify the Director of Venereal Disease Control of cases of venereal disease. Notification includes information on all contacts and the initial case. The Director, through staff in the Norquay Building in Winnipeg, organizes the location, examination and treatment (if required) of these contacts. Location of contacts in Metropolitan Winnipeg is carried out through public health nursing staff and in rural areas through health unit staff. Examination and treatment is done by practicing physicians at no cost to the patient where payment would be a hardship or provided free of charge at the Government Venereal Disease Clinic at St. Boniface Hospital.

Essentials of the program are:

- * Prompt notification of cases.
- * Complete information on cases and contacts
- * Rapid location of contacts.
- * Good administrative follow-up to ensure that contacts were actually located, examined and treated.
- * Readily available diagnostic and treatment facilities subsidized to ensure that they are available to anyone requiring them.

The Fred T. Cadham Public Health Laboratory in Winnipeg provides a blood testing service for Syphilis for the entire province and smears and cultures for gonorrhea testing received mainly from rural areas of the province. The excellent laboratory facilities of St. Boniface Hospital are also used for the examination of smears and cultures for gonorrhoea and the full facilities of the hospital are available to patients attending the Venereal Disease Clinic.

Because Syphilis is largely a hidden disease, certain routine blood testing programs are sponsored by Venereal Disease Control. These include the legally required pre-marital blood test; recommended pre-natal blood test; routine tests on submission to certain hospitals and correctional institutions.

Developments in 1967

During 1967 there were 258 cases of Syphilis. This was the highest number for 18 years (1949) and up 34% from 1966, continuing the rising trend established since 1959. Of these cases, 52 percent were infectious, i.e. in the primary or secondary stage. The group most commonly affected were single men and on an age basis - men in the 20 - 29 year age group. There were almost double the number of

cases in the 15 - 19 year age group compared to the average for the previous four years but the numbers are too small for any conclusion to be drawn from them. There were also two cases of Congenital Syphilis diagnosed during the year, one in a newborn and one in a 10 year old.

During 1967 there were 2,505 cases of Gonorrhoea, a drop of 7 percent from the previous year's all-time high but second only to that record year. The tables in the Statistical Appendix show that single males and males aged 20 - 29 have a higher incidence than other groups.

The number of new patients enrolled at the Venereal Disease Clinic during 1967 - 3,919 - remains at the same high level set the previous year - 3,939. The total attendance of patients at the Venereal Disease Clinic in 1967 numbered 8,790 - the highest for 18 years (1949).

Treatment schedules: -

(a) Gonorrhoea - Cases still respond extremely well to the high-dose schedule recommended in 1966 with virtually no relapses occurring.

(b) Syphilis - Greater use is being made of long-acting Penicillin in the treatment of Syphilis and in epidemiological treatment.

In 1967, general practitioners treated 62 percent of notified cases of Gonorrhoea and 42 percent of notified cases of Syphilis. The Balance were treated at the Venereal Disease Clinic. It is thought that many cases treated by general practitioners are not reported. Files indicate that two-thirds of persons named as contacts to Venereal Diseases in 1967 were located and approximately 60 percent of those located proved to be infected.

As in previous years new information kits were distributed to physicians through the co-operation of the Section of Health Education. These kits entitled "V.D. Information for Physicians" included up-to-date recommendations for treatment and supplies of up-to-date pamphlets and notification cards.

A heavy work load developed during the early months of the year which was resolved through staff increases in both nursing and clerical personnel at the Venereal Disease Clinic, clerical personnel at the Venereal Disease Control office and extra medical assistance for the evening Clinic. Attendance at the evening clinic was restricted to working persons only and records indicate 30 appointments. These changes demonstrated the need for flexibility in relating staff to case load.

Co-operation was received from Organization and Methods division of the Treasury Department in reviewing procedures and clerical systems both at the Central office and Clinic. Clerical procedures in the office have been simplified, and a program for record destruction has been started. Useless records of up to 30 years old are being destroyed and a program for summarizing Syphilis records has been set up.

At the end of 1967 venereal disease regulations were under active review.

A special serological survey was carried out in a small geographical area in conjunction with Indian Health in 1967 and one new case was discovered. Although this was a low yield the survey was considered successful.

Gradual progress was made in the development of a program of family living including sex education which would include Venereal

Disease Education, under the auspices of the Interprofessional Study Committee of the Winnipeg School Board. The Director of Venereal Disease control participated on this committee.

An extremely low yield of positive serological tests under the pre-marital blood test program occurred in 1967 with only four cases not previously known out of a total of 15,000 blood tests performed. This is remarkable at a time when there is a rise in infectious Syphilis occurring.

PREVENTIVE MEDICAL SERVICES

TABLE I

Biologics Distributed Free in Manitoba

	<u>1966</u>	<u>1967</u>
Cholera (cc)	128	730
Diphtheria, Pertussis, Tetanus & Polio Combined (cc)	89,660	80,060
Diphtheria, Pertussis, & Tetanus Toxoid Combined (cc)	25,171	41,634
Diphtheria, Tetanus & Polio Combined (cc)	25,240	19,190
Diphtheria Toxoid & Tetanus Toxoid Combined (cc)	33,288	56,109
Tetanus & Polio Combined (cc)	6,200	5,290
Diphtheria Toxoid (cc)	4,659	3,305
Pertussis Vaccine (cc)	279	300
Poliomyelitis Vaccine (Salk) Parenteral (cc)	14,560	12,090
Poliomyelitis Vaccine (Sabin) Oral Doses	120,260	136,960
Tetanus Toxoid (cc)	27,771	38,817
Typhoid Paratyphoid Vaccine (cc)	3,858	4,225
Typhoid Paratyphoid Vaccine & Tetanus Toxoid (cc)	12,500	10,274
Smallpox Vaccine (Points)	89,295	79,760
Rabies Vaccine (Courses)	70	58
Rabies Antiserum (Vials)	20	21
Immune Serum Globulin (16% soln.) c.c.	7,632	7,707
Diphtheria Antitoxin - Prophylactic (vials)	96	96
- Treatment (vials)	48	42
Tetanus Antitoxin - Prophylactic (vials) Equine	2,170	1,790
- Treatment (vials) Equine	13	19
Tetanus Antitoxin - Prophylactic (vials) Human	4	28
Scarlet Fever Antitoxin - Prophylactic (vials)	7	7
- Treatment (vials)	3	-
Schick Test (25 person package)	791	1,119
Silver Nitrate (Ampoules)	11,594	11,400
Measles Vaccine (Lirugen)	150	30,263

TABLE II

Drugs for the Treatment of Diabetes

Patients supplied- 1966 - 757

1967 - 859

DRUGS PROVIDED

Type	Toronto Insulin			PZ Insulin		NPH Insulin		Lente Insulin	
Strength	10	40	80	40	80	40	80	40	80
Vials	10	1245	599	1739	902	2335	2405	1674	1577

Type	Globin Insulin		Sulphated Insulin
Strength	40	80	100
Vials	41	10	2

Oral Hypoglycaemic Tablets

Drug	Tolbutamide		Chlorpropamide		Phenformin		Acetohexamide
	0.5 G.	1.0 G.	250 mgm	100 mgm	25 mgm	50 mgm	0.5 G.
No. of Tablets	148,050	1,500	71,710	2,700	6,500	28,000	3,000

TABLE III

Drugs to Prevent Rheumatic Heart Disease

Patients accepted under Program to end of 1966 - 2,116

Patients accepted under Program to end of 1967 - 2,238

Patients on Active List at end of December, 1967 - 1,264

DRUGS PROVIDED

Penicillin G.	Triple Sulfa	Erythromycin	Benzathine Penicillin
500,000 units	0.5 Grams	250 mgms.	1,200,000 units
4,076	188	2	243 vials
	BOTTLES OF 100 TABLETS		

TABLE IV

Screening of newborn infants for inborn errors of metabolism

No. of infants tested 1967 - 16,171

No. of tests done at Provincial Lab.in 1966	No. of Positives	No. of tests done at Prov. Lab. in 1967	No. of Positives
Phenylketonuria (Guthrie Test) 16,556	1	12,307	1
Aminoacidopathies & Galactosemia (Efron Chroma- tography) NIL (By Prov. Laboratory)	1 (Galactosemia) (Through Research Project)	7,931	NIL

Total births - 1967 - estimated provisionally - 16,900

Also one positive PKU confirmed in a 2 year old child.

Birth Rate per 1000 population - 17.5

Estimated Mid-year population in Manitoba - 963,000

Percentage Screened = $\frac{16,171}{16,900} = 95\%$ of total births.

TABLE V
Patients Receiving Free Life Saving Drugs - 1967

Diagnosis	Accepted for Assistance-1967	Total Receiving Drugs
Phenylketonuria (on Lofenolac)	6	17
Galactosemia (on Nutramigen)	-	1
Cystic Fibrosis	7	49
Diseases of Nervous System (including Epilepsy)	3	15
Chronic Infectious Diseases	10	18
Diseases of Respiratory System (including Asthma)	1	6
Diseases of the Heart	6	14
Diseases of the Endocrine Glands	7	17
Collagen Diseases	2	5
Organ Transplants (Kidneys)	2	2
Miscellaneous	4	8
Total	48	152

1967 - applications rejected - 32

1967 - applications pending - 9

TABLE VI

Rabies in Animals (Manitoba-1967) Humans Given Prophylactic Treatment

Animal -	<u>Skunk</u>	<u>Fox</u>	<u>Badger</u>	<u>Bovine</u>	<u>Bat</u>	<u>Total</u>
	25	3	1	5	1	35

Humans given prophylactic treatment - 60

Of these animal contact proved positive - 6

Human cases of Rabies - NIL

TABLE VII

COMMUNICABLE DISEASES AND CANCER REPORTED CASES AND DEATHS

MANITOBA - 1966 and 1967

Disease	Cases		Deaths		Death Rate per 100,000 Population	
	1966	1967	1966	1967	1966	1967
Brucellosis (Undulant fever)	2	1	-	-	-	-
Diarrhoea of the Newborn-epidemic	3 (1)	-	- (1)	-	0.1	-
Diphtheria cases	12 (1)	10 (5)	3	-	0.3	-
Diphtheria carriers	21 (3)	26 (13)	-	-	-	-
Dysentery:						
(a) Amoebic	-	1	-	-	-	-
(b) Bacillary	67 (9)	97 (23)	-	-	-	-
(c) Other and unspecified	44 (4)	50 (13)	1 (1)	1 (1)	0.1	0.1
Encephalitis						
(a) Infectious	-	2	2 (1)	-	0.2	-
(b) Post Infectious	6	9 (1)	-	-	-	-
(1) Measles	1	4 (1)	-	-	-	-
(2) Mumps	4	5	-	-	-	-
(3) Chickenpox	1	-	-	-	-	-
Filariasis	1	-	-	-	-	-
Food Poisoning	125 (1)	118 (5)	1 (1)	-	0.1	-
(a) Staphylococcus intoxication	1	71 (2)	-	-	-	-
(b) Salmonella	31 (1)	43 (1)	-	-	-	-
(c) Unspecified	93	4 (2)	-	-	-	-
Hepatitis, Infectious (including Serum Hepatitis)	346 (10)	365 (18)	4	-	0.4	-
Malaria	1	2	-	-	-	-
Meningitis viral or aseptic	22 (3)	18	-	-	-	-
(a) due to Polio virus	-	-	-	-	-	-
(b) due to Coxsackie virus	-	-	-	-	-	-
(c) due to ECHO virus	-	-	-	-	-	-
(d) other and unspecified	22 (3)	18	-	-	-	-
Meningococcal infections	5 (1)	3	1	-	0.1	-
Pemphigus Neonatorum	6	-	-	1 (1)	-	0.1
Pertussis (whooping cough)	45 (1)	49	2 (1)	-	0.2	-
Psittacosis and Ornithosis	-	2	-	-	-	-
Scarlet Fever and Streptococcal Sore Throat	185 (2)	104	1	-	0.1	-
Tetanus	1	2	1	1	0.1	0.1
Tularaemia	-	1 (1)	-	-	-	-
Typhoid and Paratyphoid Fever	2	-	-	-	-	-
Typhoid carrier	3	1	-	-	-	-
Poliomyelitis, paralytic	3	-	-	-	-	-
Cancer	3,200	3,300	1,473 (24)	1,600	147.0	165
Population 1966 - 958,000						
1967 - 963,000						

Figures in brackets () - Treaty Indians

TABLE VIII

Reciprocal Tuberculosis Agreement - 1967

Residents of other Provinces Treated in Manitoba Sanatoria

<u>Province</u>	<u>Number of Patients</u>	<u>Rate</u>	<u>Days Accrued</u>	<u>Amount Received</u>
Ontario	8	\$ 13.50	311	\$ 4,198.50
Saskatchewan	2	13.50	80	1,080.00
Alberta	1	13.50	45	607.50
British Columbia	1	10.00	21	210.00
New Brunswick	1	13.50	7	94.50
Quebec	1	13.50	48	648.00
TOTAL:	14		512	\$ 6,838.50

Residents of Manitoba Treated in other Provinces

<u>Province</u>	<u>Number of Patients</u>	<u>Rate</u>	<u>Days Accrued</u>	<u>Amount Received</u>
Ontario	2	\$ 13.50	309	\$ 4,171.00
Saskatchewan	1	13.50	200	2,700.00
Alberta	1	13.50	213	2,875.50
British Columbia	-	-	-	-
New Brunswick	-	-	-	-
Quebec	-	-	-	-
TOTAL:	4		722	\$ 9,746.50

TABLE IX

Transportation and Funerals

Transportation provided for patients who were provincial responsibilities during 1967

Tuberculosis

No. of patients provided with transportation	41
No. of patients provided with board & lodging awaiting transportation	<u>6</u>
Total:	47
Cost of transportation - \$ 587.00	
Cost Board & Lodging - <u>54.00</u>	
Total: \$ 641.00	

Transfer between Hospitals and Home from Hospital

No. of patients provided with transportation	591
No. of patients provided with board & lodging awaiting transportation	<u>120</u>
Total:	711
Cost of transportation - \$5,538.22	
Cost Board & Lodging - <u>1,717.39</u>	
Total: \$7,255.61	

Funerals

No. of funerals paid for during 1967	-	9
Cost of funerals paid for during 1967	-	\$ 1,395.00

TABLE X

Central Tuberculosis Registry

1967

1966

Reported as:

	Reported as:			Reported as:		
	Whites	Treaty Indians	Eskimos	TOTAL	Whites	Treaty Indians
						Eskimos
						TOTAL
Total Tuberculous patients carried in Registry file December 31st	5,172	1,894	469	7,535	5,120	1,982
						533
Post Primary type	4,994	1,817	411	7,222	4,949	1,894
Primary type	178	87	58	323	171	88
						64
						7,312
						323
New Cases of tuberculosis diagnosed in Manitoba	194	72	-	266	188	50
						-
Post Primary type	181	61	-	242	172	44
Primary type	13	11	-	24	16	6
						-
Of these, the number of active cases	160	54	-	214	161	41
Number admitted to Sanatoria	124	52	-	176	124	33
						-
						202
						157
New Diagnoses counted upon notification of Death	6	1	-	7	6	1
						-
						7
Deaths from tuberculosis	22	3	-	25	25	2
						-
						27
						(2.8 per 100,000)

Treaty Indians and Eskimos are wards of the Dominion Government.

1967 figures are preliminary.

TABLE XI
Classification of New Active Tuberculosis

By Extent of Disease	1966			1967		
	Whites	Indians	Total	Whites	Indians	Total
Primary tuberculosis	13	11	24	16	6	22
Minimal tuberculosis	28	12	39	37	10	47
Moderately advanced tuberculosis	30	9	39	22	8	30
Far advanced tuberculosis	37	9	46	31	5	36
Pulmonary tuberculosis, extent not stated ..	5	1	6	4	1	5
Tuberculosis pleurisy	16	4	20	11	4	15
Non-pulmonary tuberculosis	31	8	39	40	7	47
	<u>160</u>	<u>54</u>	<u>214</u>	<u>161</u>	<u>41</u>	<u>202</u>

[illegible]

TABLE XII
CLINICS AND SURVEYS

1966

	<u>Whites</u>	<u>Indians</u>	<u>Eskimos</u>	<u>TOTAL</u>	<u>Whites</u>	<u>Indians</u>	<u>Eskimos</u>	<u>TOTAL</u>
Total x-rayed at Clinics and Surveys .	45,551	18,287	1,800	65,638	52,009	17,611	3,351	72,971
Stationary Clinics	7,201	463	-	7,664	7,087	23	-	7,110
Travelling Clinics	407	-	-	407	112	-	-	112
Surveys	37,943	17,824	1,800	57,567	44,810	17,588	3,351	65,749
Total number Tuberculin Tested	69,529	-	-	69,529	53,472	-	-	53,472
New Diagnoses of Tuberculosis (active and inactive)	181	24	-	205	147	35	-	182
Stationary Clinics	157	1	-	158	132	23	-	155
Travelling Clinics	-	-	-	-	-	-	-	-
Surveys	24	23	-	47	15	12	-	27
Old Tuberculous Patients reviewed	3,054	899	-	3,953	2,925	864	-	3,789
Stationary Clinics	2,631	86	-	2,717	2,572	-	-	2,572
Travelling Clinics	141	-	-	141	47	-	-	47
Surveys	282	813	-	1,095	306	864	-	1,170
Number of Contacts examined at Clinics.	2,981	315	-	3,296	2,422	-	-	2,422
Stationary Clinics	2,746	315	-	3,061	2,408	-	-	2,408
Travelling Clinics	235	-	-	235	14	-	-	14

TABLE XIII

Institutional Statistics

	<u>1966</u>				<u>1967</u>			
	<u>Treaty</u>		<u>Whites</u>	<u>Total</u>	<u>Treaty</u>		<u>Whites</u>	<u>Total</u>
	<u>Indians</u>	<u>Eskimos</u>			<u>Indians</u>	<u>Eskimos</u>		
Patients in Sanatoria as at December 31st	75	36	97	208	58	31	102	191
Number of patients admitted to Sanatorium	240	91	344	675	173	90	350	613
Of these, number found to be tuberculous	109	33	214	356	78	40	197	315
<u>First Admissions:</u>								
Primary type of tuberculosis	14	4	10	28	7	15	16	38
Minimal pulmonary tuberculosis	12	7	25	44	14	5	32	51
Moderately advanced pulmonary tuberculosis.	9	8	31	48	10	3	25	38
Far advanced pulmonary tuberculosis	11	1	33	45	5	1	30	36
Tuberculous pleurisy	4	2	18	24	6	2	9	17
Non-pulmonary tuberculosis	7	-	12	19	5	1	28	34
TOTAL	57	22	129	208	47	27	140	214
<u>Re-Admissions:</u>								
Primary type of tuberculosis	-	-	1	1	-	3	-	3
Minimal pulmonary tuberculosis	11	5	19	35	6	5	10	21
Moderately advanced pulmonary tuberculosis.	15	4	10	29	11	1	9	21
Far advanced pulmonary tuberculosis	7	-	21	28	3	2	17	22
Tuberculous pleurisy	1	-	-	1	-	-	1	1
Non-pulmonary tuberculosis	1	-	7	8	2	-	11	13
TOTAL	35	9	58	102	22	11	48	81
Number of patients admitted for review	17	2	27	46	9	2	9	20
Number of tuberculous patients transferred.	75	45	40	160	62	32	56	150

TABLE XIV
Sanatorium Discharge

	1966				1967			
	Whites	Treaty Indians	Eskimos	TOTAL	Whites	Treaty Indians	Eskimos	TOTAL
Number of patients discharged from Sanatoria ...	308	171	39	517	289	127	62	478
Of these, no. of tuberculous patients discharged	220	114	26	360	182	91	46	319
Discharged with active improved tuberculosis .	132	33	6	171	110	49	17	176
Discharged with active unimproved tuberculosis	7	2	-	9	9	1	-	10
Discharged with quiescent tuberculosis	1	-	-	1	-	1	-	1
Discharged with tuberculosis of undetermined activity	6	3	-	9	4	2	-	6
Discharged with inactive tuberculosis	36	59	18	113	38	28	24	90
Discharged dead	10	1	-	11	12	-	3	15
TOTAL	192	98	24	314	173	81	44	298
Discharged after review	28	16	2	46	9	10	2	21
Number discharged against medical advice	9	5	-	14	8	12	-	20

VENEREAL DISEASE CONTROL

TABLE XV

GONORRHOEA AND SYPHILIS - REPORTED CASES, BY
SEX AND MARITAL STATUS - MANITOBA 1967
ADULTS (18 years and over)

Gonorrhoea				Syphilis		
Status	Male	Female	Total	Male	Female	Total
Married	305	168	473	38	27	65
Single	1,173	500	1,673	96	41	137
Widowed, divorced, separated, com/law	197	162	359	25	31	56
TOTAL	1,675	830	2,505	159	99	258

TABLE XVI

GONORRHOEA AND SYPHILIS - REPORTED CASES
BY AGE GROUP, MANITOBA, 1967

Age Group	Gonorrhoea				Syphilis			
	Male	Female	Total	% of TOTAL	Male	Female	Total	% of TOTAL
Under 1 year	1	0	1	0	0	1	1	0
1 - 9	0	0	0	0	0	0	0	0
10-14	1	18	19	1	0	1	1	0
15-19	205	213	418	17	6	12	18	7
20-29	672	326	998	40	64	49	113	44
30-39	633	241	874	35	39	21	60	24
40-49	107	28	135	5	24	13	37	14
50-59	47	3	50	2	11	6	17	7
60 yrs. & over	9	1	10	0	10	1	11	4
TOTAL	1,675	830	2,505	100	154	104	258	100

TABLE XVII

ALLEGED CONTACTS TO VENEREAL DISEASE, TABULATED
ACCORDING TO RESULTS OF EXAMINATION, MANITOBA, 1967

Results	Number of Contacts	% of Total
Positive Gonorrhoea only	869	32
Positive Syphilis only	112	4
Positive Both	1	-
Negative	670	25
Not located - file closed	771	29
Current open file	277	10
TOTAL	2,700	100

TABLE XVIII

SYPHILIS - REPORTED CASES, TABULATED ACCORDING
TO TYPE OF SYPHILIS - MANITOBA, 1967

	Primary	Secondary	Latent	Tertiary	Congenital	TOTAL
Under 1 year	-	-	-	-	1	1
1 - 9	-	-	-	-	-	-
10-14	-	-	-	-	1	1
15-19	6	3	9	-	-	18
20-29	37	25	52	1	-	115
30-39	25	13	20	-	-	58
40-49	12	5	19	1	-	37
50-59	3	3	9	2	-	17
60 plus	2	1	7	1	-	11
TOTAL	85	50	116	5	2	258

TABLE XIX

SYPHILIS AND GONORRHOEA, REPORTED CASES MANITOBA 1958 - 1967

Syphilis	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
Primary	8	7	8	18	48	42	50	28	88	85
Secondary	2	2	8	5	12	21	33	10	25	50
Tot. Infectious	10	9	16	23	60	63	83	38	113	135
Other (latent, tertiary, etc.)	48	36	32	48	85	87	85	93	79	123
Not Infectious										
TOTAL	58	45	48	71	145	150	168	131	192	258
Gonorrhoea	1,362	1,636	1,892	2,178	1,817	1,786	2,141	1,968	2,707	2,505

TABLE XX

REPORTED CASES
GONORRHOEA AND SYPHILIS IN 15 - 19 YEARS OF AGE
MANITOBA - 1958-1967

Year	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
GONORRHOEA										
Male	17	21	21	31	37	124	35	134	225	205
Female	51	52	69	85	79	187	100	208	275	213
TOTAL	68	73	90	116	116	311	135	342	500	418
SYPHILIS										
Male	1	1	1	1	2	5	3	5	5	6
Female	0	0	1	2	1	6	5	4	5	12
TOTAL	1	1	2	3	3	11	8	9	10	18
TOTAL CASES	69	74	92	119	119	322	143	351	510	436

TABLE XXI

PERSONS EXAMINED ON THE MINISTER'S ORDER FORM IV-A
MANITOBA, 1967

	POSITIVE		NEG.	TOTAL EXAMINED
	GONORRHOEA	SYPHILIS		
Cases	27	11	45	83
Percentage	32%	13%	55%	100%

TABLE XXII

RESULTS OF PRE-MARITAL BLOOD TESTS - MANITOBA, 1967

<u>Pre-Marital Blood Tests</u>	<u>Positive Tests Not Previously Known</u>	<u>Percentage of Total Found Positive</u>	<u>Rate Positive</u>
15,296	4	0.026	1 in 3,824

TABLE XXIII

DETENTION HOMES AND GAOLS:

Patients treated in Detention homes and Gaols:

Gonorrhoea	123
Syphilis	52
TOTAL	<u>175</u>

TABLE XXIV
RESULTS OF LABORATORY EXAMINATIONS ON CLINIC PATIENTS
MANITOBA, 1967

Examinations	Positive	Negative	TOTAL
V.D.R.L. Tests (for Syphilis)	424	3,874	4,298
Reiter's Protein Complement Fixation Test (RPCF) for Syphilis	404	340	744
Treponema Immobilization Test	-	3	3
Cerebrospinal Fluid Tests V.D.R.L.	4	43	47
Darkfield Examinations (for Treponema Pallidum)	50	52	102
Smears for Gonorrhoea	739	1,711	2,450
Cultures for Gonorrhoea	686	1,657	2,343
Swabs for Trichomonas	229	1,624	1,853

TABLE XXV
MANITOBA GOVERNMENT CLINIC - ST. BONIFACE O.P.D.
NEW PATIENTS ADMITTED 1958-1967

New Patients Admitted	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
Syphilis	16	19	12	32	73	80	100	56	107	148
Gonorrhoea	548	775	920	943	814	820	999	952	1,074	949
Non-Specific Urethritis	132	141	131	122	105	114	181	181	183	164
Miscellaneous	298	426	486	552	614	866	1,123	1,279	1,590	1,416
No Pathological Condition	621	784	708	675	788	1,143	965	940	985	1,242
TOTAL	1,615	2,145	2,257	2,324	2,394	3,023	3,368	3,408	3,939	3,919

New cases of Gonorrhoea & Syphilis notified in Manitoba

Peak incidence years since records have been kept are:

Gonorrhoea 1966-2707 cases;

Syphilis 1942-696 cases.

Post war low incidence years are :

Gonorrhoea 1955-1215 cases. Syphilis 1959-45 cases.

FIG. 1

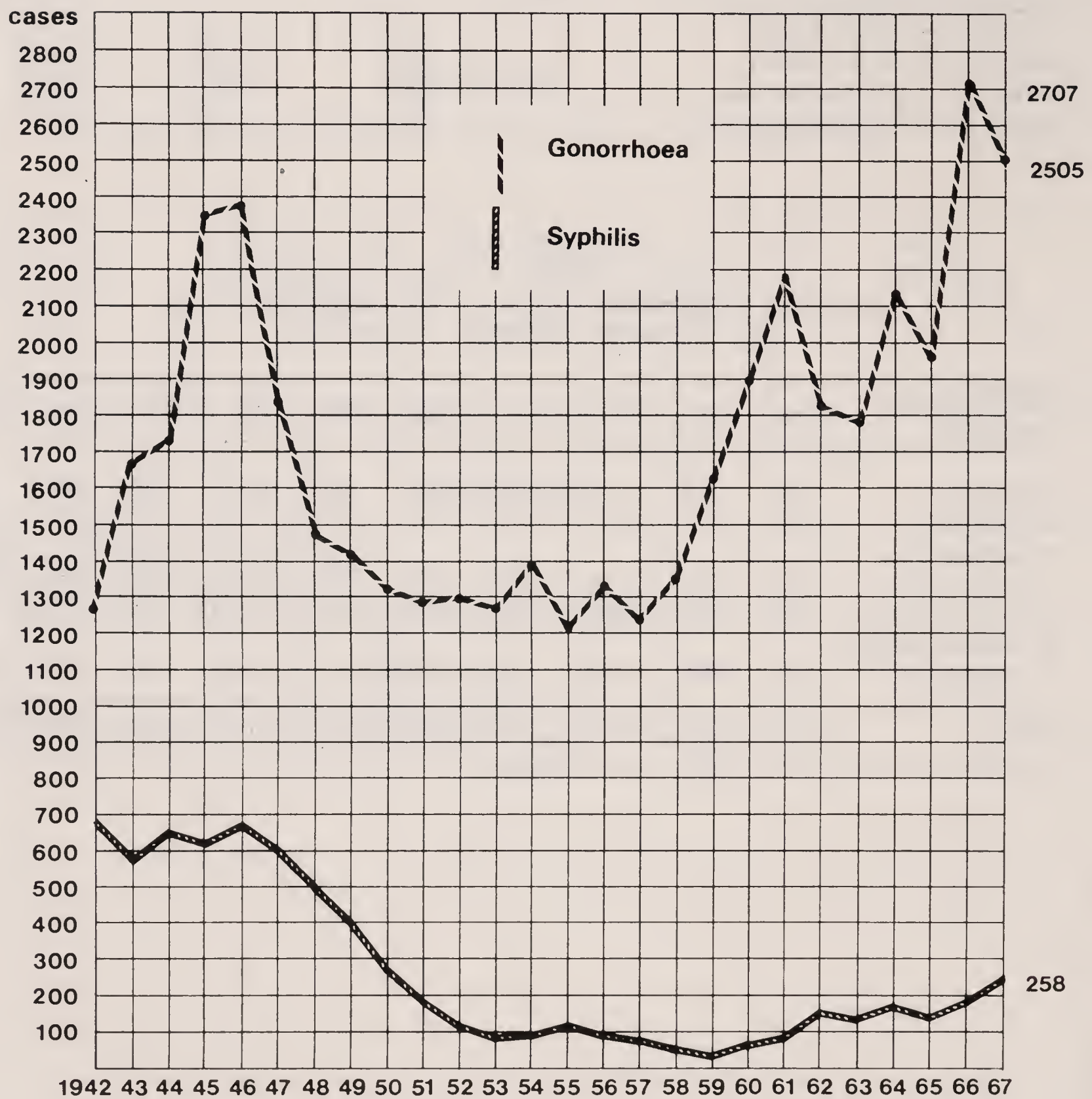
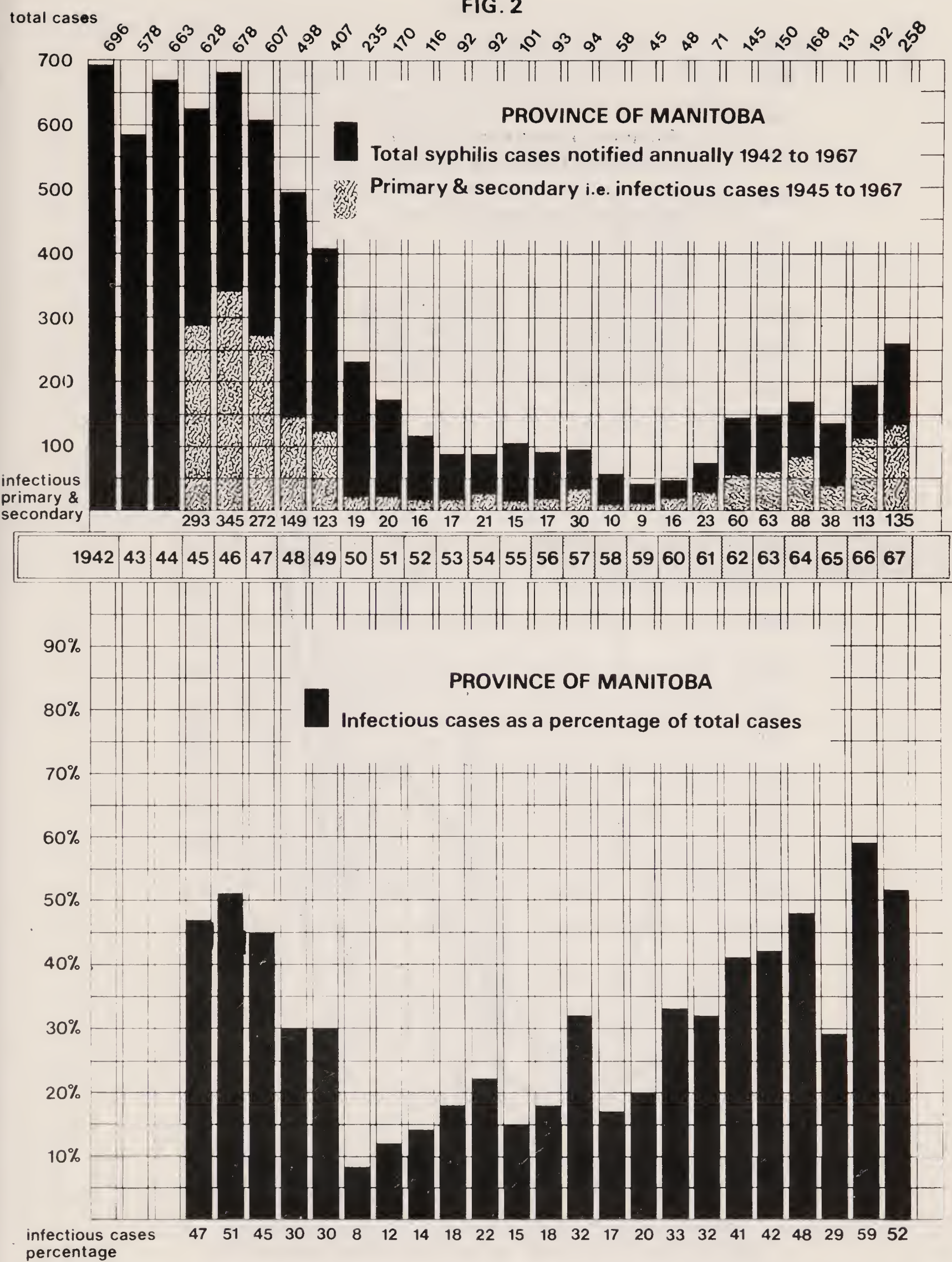
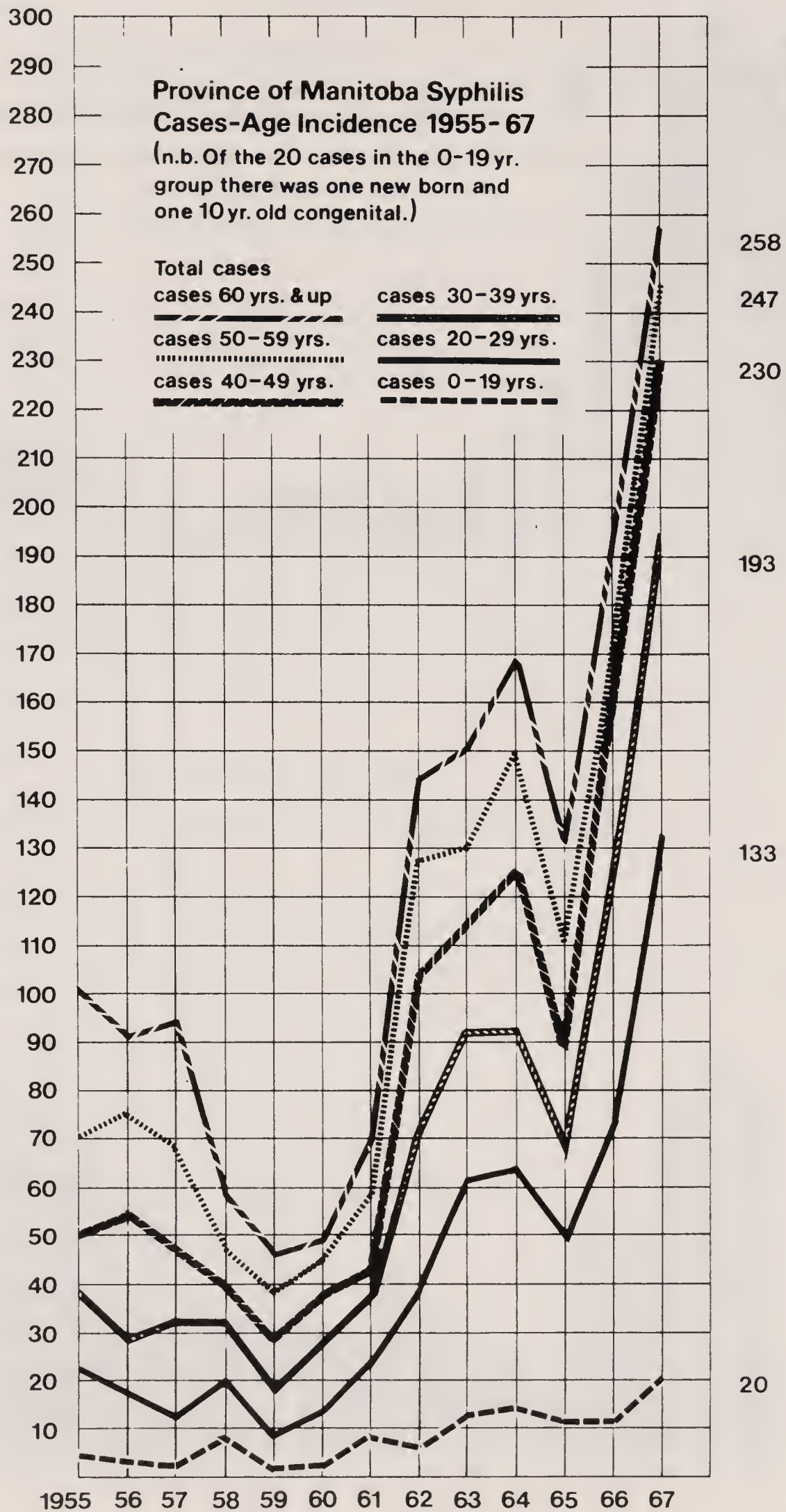


FIG. 2



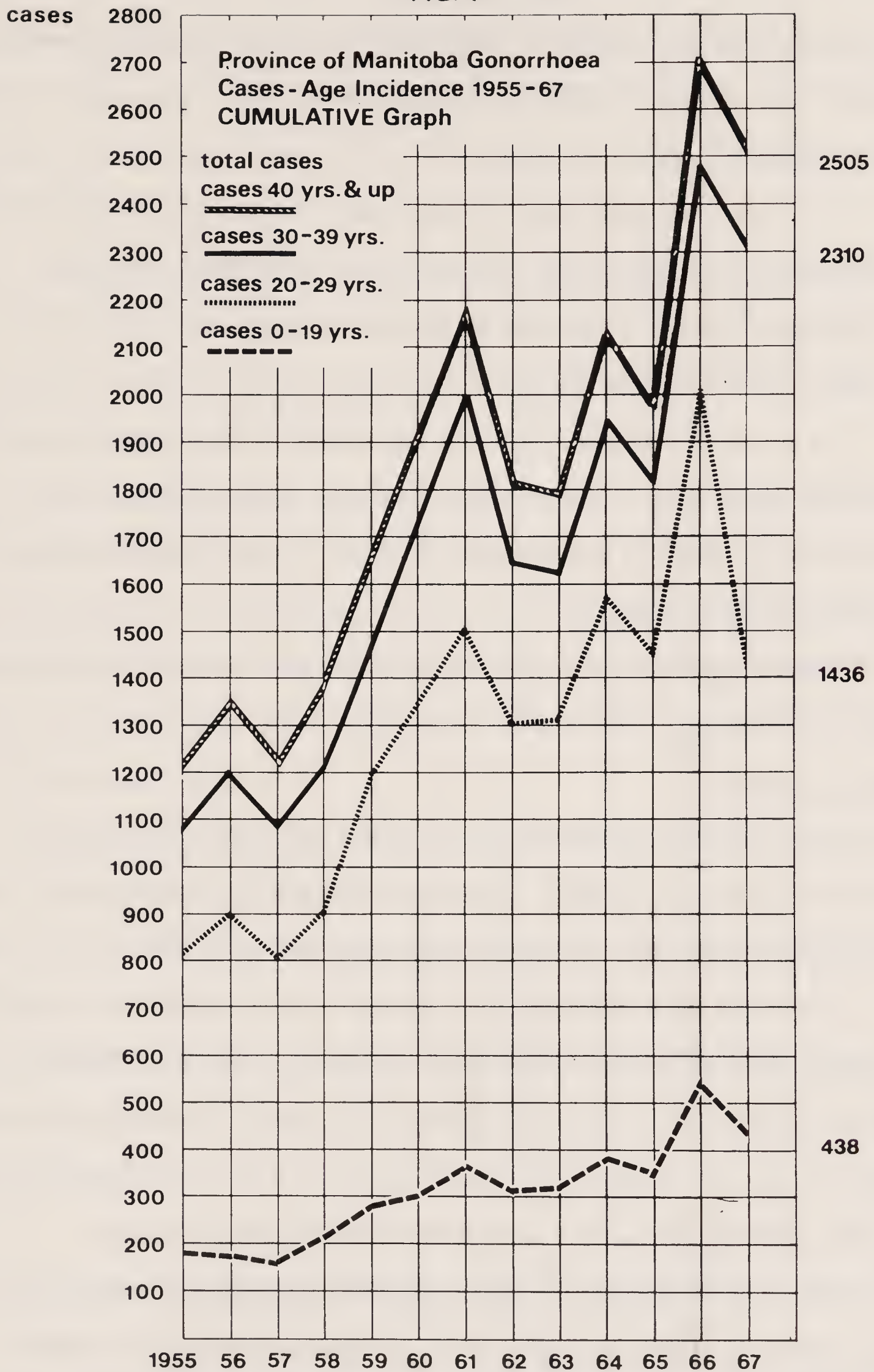
CASES

FIG. 3



This graph shows the largest number of reported cases occur in the 20-29 yr. age group.

FIG. 4



This graph shows that the age group with the largest number of reported cases is the 20-29 yrs. old.

CARE SERVICES

Care Services section is responsible for the co-ordination of services for the aged and adult infirm in need of care, but not requiring hospital care.

In the Metropolitan area of Winnipeg, Care Services has assumed the responsibility of providing direct services. In rural areas, Care Services provides advisory and consultant services to Health Units and Welfare Regions.

The staff of Care Services is comprised of Health personnel consisting of physicians, public health nurses, a nutritionist, and an administrative officer and Welfare personnel consisting of social workers and welfare workers.

Detailed services provided under the Care Services organization include:

Services to People

This entails the provision of direct service to the social allowance recipient and restricted service involving consultation, advice and assistance to the financially independent person.

In providing comprehensive care for an individual, his total needs are assessed and clearly defined. The type of care provided depends on assessment findings regarding the present medical condition, the needs of the individual and the potential of the individual, his family, his home environment and community resources.

When possible, the person is sustained in, or returned to, his own home environment. Failing this, a logical sequence of care facilities, such as the home of relatives, foster home, hostel (for personalized services) or nursing home are considered.

Requests for services are followed through by social workers

and nurses. Social, medical and nursing reports are prepared and then considered by the medical-social panel of Care Services. The total needs of the individual are defined and recommendations for a comprehensive care plan are made and, if acceptable to the individual, are implemented.

(a) Home Care: Whenever possible, the individual is supported in a home environment as this has many psychological benefits. His status as a member of the family and community is sustained. He retains a sense of individuality, privacy and security.

A person may be supported in a home environment with medical and nursing services, optical and dental care, attendant services and counselling by social workers. When a foster home is recommended, a home finder service is provided. Provision is made for financial assistance to cover basic needs, transportation, drugs, and equipment such as wheelchairs, etc.

The services of other agencies (such as hospital out-patient departments, hospital home care programs, Victorian Order of Nurses, the Canadian Arthritis and Rheumatism Society, the Society for Crippled Children and Adults, the Canadian Paraplegic Association, Meals Delivery Services, day centres, social clubs, day hospitals, Age and Opportunity Bureau, etc.), are used to assist in supporting the home care program.

(b) Nursing Home or Hostel Care: If care in the home is not practicable, placement in a nursing home or hostel becomes necessary. In addition to the physical care needs which determine the type of home, the individual's personal preferences are considered and met whenever possible.

As outlined under Home Care, complete medical and social coverage is provided.

Services to Institutions

Care Services assists hospitals in discharging to other facilities patients who no longer require acute or extended hospital treatment. To this purpose continuous liaison is maintained with hospitals by medical, nursing and social welfare personnel.

A consultation service to assist hospitals in the placement of private patients is also given.

Care Services is responsible for setting standards for all elements of care in hostels and nursing homes and for the recommending of licensing or approval of all types of care facilities.

Physicians are assigned to nursing homes, visit on a regular weekly basis and are available for emergency calls at other times.

Care Services staff visit the homes frequently to ensure maintenance of high standards of care and are available for consultation on problems relating to individual residents or the general operation of the homes.

Activities and recreational programs are being encouraged and developed, particularly in the newer homes where adequate space is available. Wherever possible, these programs are initiated and supervised by professional therapists.

Educational Services

Care Services provides a variety of educational experiences for students in nursing, social work, welfare, etc. In addition, social workers, registered nurses and dietetic internes visit Care Services to observe specific aspects of the program.

A series of organized institutes and courses have been developed for registered nurses in charge of nursing homes, nurse's aides in nursing homes, cooks, administrators and foster home families. Orientation for personnel of new homes is offered and occasional one-day seminars are held on such subjects as activities, accounting, nutrition, etc.

The staff of Care Services is frequently called upon to participate as speakers and panellists at meetings and contribute in various research and study projects related to the elderly.

Direct Service To Patients

During 1967 a total of 1060 patients were reviewed at medical social assessment panels. Of this number 380 were referred to Care Services by hospitals and 527 came from the community. (See Table I).

Our records show that of the 380 patients referred by hospitals, 227 were placed in nursing homes, hostels or foster homes. A number (44) were recommended for continued hospital care and approximately 50 to 55 persons were awaiting nursing home placement as of December 31, 1967.

The discrepancy in the number of persons recommended for nursing homes and the number actually placed may be due to several reasons, such as repeat assessments, death in hospital after assessment while awaiting placement, or recommendations for placement not followed through.

The placement and movement of patients is shown in Table II. The increase from 462 (in 1966) to 592 in the number of institutional placements is mainly the result of the opening of a new nursing home in Transcona and the new wing of the Convalescent Home in Winnipeg.

Of the 1060 persons referred to Care Services for assistance (Table III), 548 (51.6%) were "new cases", others were transferred to Care Services from other welfare regions because they now had definite care needs and the remainder were "re-opened cases". The latter represents a group already known to Care Services who, for various reasons, again applied for service.

Deaths

The number of deaths in 1967 is substantially the same as for the previous year. Of the 613 deaths reported, the place of death was:

1.	Hospitals	256	41.8 %
	Active treatment	191	
	Extended care	65	
2.	Nursing Homes	274	44.6 %
3.	In community	24	3.91%
4.	Outside Metro Winnipeg	24	3.91%
5.	Late reports (not otherwise classified)	35	5.8 %
		<u>613</u>	<u>100 %</u>

Bed Vacancies

The vacant beds as shown in the monthly occupancy report (see Table IV) may be due to several reasons:

Winnipeg Area - The C.N.I.B. and Sharon Home show 25 vacant beds. This is due to lack of demand for accommodation at the C.N.I.B. home, and at the Sharon Home this is an attempt to correct previous overcrowding; for example, a three-bed room is now occupied by two patients and a two-bed room is now a single room.

Central Interlake and Brandon Regions - In these districts the majority of the vacant beds are in new homes which had not yet reached full occupancy.

Northern Region - In this district a hostel of 84 beds was recently closed.

Most nursing homes have almost 100% occupancy at all times.

New Construction

During the past year several new care facilities were completed and opened their doors to patients.

Park Manor personal care home, Transcona, with 100 beds, was opened in April, 1967. It is well staffed and provides heavy nursing care for the aged sick as well as a group of young disabled, such as multiple sclerosis and paraplegics.

In June 1967, a 24-bed addition to the Convalescent Home in Winnipeg was opened, increasing the bed capacity in this home from 60 to 84.

The East View Lodge, Neepawa, was completed early in 1967. This is a combined facility with accommodation for 45 hostel residents and 30 patients requiring nursing home care.

The Boyne Valley Lodge, Carman, began admitting patients in August, 1967. This home is also a combined facility with 45 hostel beds and 24 nursing home beds.

In addition to these non-proprietary homes, one new proprietary home, Central Park Lodge, Brandon, was opened early in 1967. It provides medium and heavy nursing care for 89 patients.

To offset the beds gained by new construction, several old proprietary homes were closed during the year with a loss of 35 beds in Winnipeg and 16 in Carberry. A rural proprietary home (hostel) of 84 beds closed late in 1967.

Educational Services in 1967

Nurse's Aides and Nursing Orderlies training courses were organized in 1967 by Care Services in co-operation with the Public Health Nursing Division of the Department of Health. The course consists of 20 hours of instruction and demonstration by a registered nurse with teaching and nursing home experience. One lecture is given by a staff member of the Canadian Arthritis and Rheumatism Society and one by the Care Services nutritionist. The reaction of nursing home operators has been most enthusiastic, which is evidenced by the number of referrals for future courses. The supervising nurses from Care Services have also noted improvement in the standards of patient care given by nurse's aides and nursing orderlies who have had these courses. During 1967 a total of 85 nurse's aides and nursing orderlies attended these classes. Further courses are planned for the coming year.

A two-day institute for registered nurses in nursing homes was held in June, 1967. This institute was organized jointly by the Faculty of Nursing Education, University of Manitoba, and Care Services, with assistance from a nurse supervisor from Municipal Hospitals. Professor Margaret Grainger of the University of Minnesota was the main speaker.

Twenty-four graduate nursing students of the Faculty of Nursing Education, University of Manitoba, had field work experience in nursing homes and in our home care program.

During 1967 a number of nursing supervisors from the Winnipeg General Hospital were taken on visits to nursing homes.

One of the Care Services Nurses attended a three-week course on rehabilitation sponsored by the Rehabilitation Services and the Manitoba Rehabilitation Hospital.

In October, 1967, the Age and Opportunity Bureau, in cooperation with Municipal Hospitals, held a one-day seminar for nurses in nursing homes. Three of the Care Services nurses assisted with this seminar.

A dietary institute was held in April for cooks of care facilities in the province in cooperation with the Manitoba Hospital Commission and the Manitoba Hospital Association.

Members of Care Services staff have lectured to various student and professional groups.

Other Services

For the second successive year a medical student was employed during the summer months to study the utilization by nursing homes of outpatient services in Metropolitan Winnipeg Hospitals and to determine whether any improvements could be effected, such as better reporting, lessening the time spent by patients waiting for appointments, etc. This study was carried out under the personal supervision of the Clinical Director and has already resulted in improved liaison between hospital outpatient departments and nursing homes.

Consultation services are provided on request regarding problems related to nursing homes and/or patients in areas not routinely covered by Care Services. This may involve any of the professions represented in the Health Section of Care Services, that is, medical, nursing, nutrition or health inspection.

All functional programs and architectural plans for new construction are reviewed very carefully by members of Care Services.

TABLE I NUMBER OF PATIENTS ASSESSED FOR CARE, WITH CURRENT AND RECOMMENDED PLACEMENT INDICATE, 1967

													Total	Total	
Current Placement	Recommended Placement	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	1967	1966
Hospital	to Community Placement	3	4	8	3	4	5	3	3	3	5	3	1	45	50
Hospital	to Domiciliary Care Institution	2	2	2	2						1	1		10	23
Hospital	to Nursing Home	21	29	26	16	30	27	19	29	27	18	21	18	281	251
Hospital	to Continued Hospital Care	3	1	7	1	5	4	2	5	1	7	6	2	44	51
														380	375
Domiciliary Care Institution	to Continued Domiciliary Care Institution	5	2	3	2		2	1	2	3		4		24	41
Domiciliary Care Institution	to Nursing Home Placement			1	2	1	3	1		1		1	1	11	21
Domiciliary Care Institution	to Hospital					1								1	1
Nursing Home	to Continued Nursing Home	6	6	12	15	7	17	3	10	12	5	13	7	113	93
Nursing Home	to Community Placement					1			1	1		1		4	4
														153	160
Community	to Continued Community Placement	19	24	26	23	27	29	23	20	14	16	38	26	285	352
Community	to Domiciliary Care Institution	1	3	2	7	5	4	6	5	4	2	6	5	50	63
Community	to Nursing Home Placement	10	14	21	17	12	16	22	17	12	14	19	13	187	147
Community	to Hospital	1			1	1		1			1			2	17
														527	579
Totals		71	85	108	88	94	107	81	92	78	69	109	77	1060	1114

TABLE II

PLACEMENT AND MOVEMENT OF PATIENTS (1967)

	Total												Total	
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	1967	1966
Number of Institutional Placements	43	33	33	74	61	96	48	47	52	32	38	35	592	462
Number of Community Placements	37	13	11	10	13	11	13	7	7	8	6	15	151	172
Number of Hospital Admissions from Institutions	56	45	46	59	44	63	39	54	33	35	55	44	573	572
Number of Transfers from One Nursing Home to Another	4	3	5	30	11	21	12	12	10	7	12	7	134	125
Number of Deaths	62	53	49	53	58	48	52	54	42	52	51	39	613	619

TABLE III

INTAKE AND CONTINUOUS REGISTER OF PATIENTS (1967)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total 1967	Total 1966
New Cases	33	41	45	41	35	58	53	37	36	79	45	45	548	556
Cases Re-opened	17	15	23	18	19	15	24	22	22	17	21	31	244	233
Transferred from Other District Office	27	32	23	23	38	15	21	24	15	22	25	23	288	380
Number of Patients in Institutions	1290	1302	1286	1304	1329	1337	1374	1361	1369	1380	1375	1376	1080	1169
Number of Patients in Community (Home - Foster Home)	1000	991	998	992	979	965	945	954	955	967	976	993		

TABLE IV

MONTHLY OCCUPANCY REPORT (NOVEMBER 1967)

	Maximum Licenced Bed Capacity	Maximum Licenced Beds Utilized	Maximum Days on Licenced Utilized Beds	Actual Days	Percentage of Occupancy	Vacant Beds End of Month	Social Allowance Days	Percentage of Total Days	Private Days	Percentage of Total Days
Winnipeg Region	2232	2219	66268	65345	98.6	31	41039	62.9	24216	37.1
Central Interlake	452	441	13230	12084	91.3	34	6179	51.1	5905	48.9
Eastern Region	399	399	12032	11575	96.2	16	6975	60.3	4600	39.7
Brandon District	727	711	21472	19345	90.1	70	7889	40.8	11456	59.2
Portage Region	279	278	8370	7669	91.6	23	3851	50.2	3818	49.8
Dauphin Region	107	107	3210	3193	99.5	2	1818	56.9	1375	43.1
Northern Region	156	154	4704	3189	67.8	50	1982	62.2	1207	37.8
TOTALS	4352	4309	129286	122400	94.7	226	69733	57.0	52577	43.0

TABLE V

HOSTELS AND NURSING HOMES - MANITOBA

RURAL MANITOBA

<u>Homes</u>		<u>Bed Capacity</u>
31 Rural Non-proprietary Homes		
	Hostel	1,310
	Nursing Home	<u>290</u>
	Total Beds	1,600
14 Rural Proprietary Homes		
	Nursing Home	<u>440</u>
	Total Beds	440
45 Total Rural Homes		
	Hostel	1,310
	Nursing Home	<u>730</u>
	Total Rural Beds	2,040

METROPOLITAN WINNIPEG

<u>Homes</u>		<u>Bed Capacity</u>
12 Non-Proprietary Homes		
	Hostel	542
	Nursing Home	<u>896</u>
	Total Beds	1,438
21 Proprietary Homes		
	Hostel	0
	Nursing Home	<u>799</u>
	Total Beds	799
33 Total Metropolitan Winnipeg Homes		
	Hostel	542
	Nursing Home	<u>1,695</u>
	Total Beds	2,237

As at December 31, 1967.

PUBLIC HEALTH NURSING SERVICES

Public Health Nursing Services in the Manitoba Department of Health has responsibility in the administration of two distinct programs:

1. Generalized public health nursing services
2. Practical Nursing, including the education and licensing of practical nurses.

I. Public Health Nursing

The staff of public health nursing services consisting of a director, educational director, five generalized nursing consultants and three specialized consultants are responsible for developing and maintaining a high quality departmental public health nursing service through:

- 1 - recruitment, orientation and assignment of staff.
- 2 - consultation and professional supervision of nurses assigned to health units.
- 3 - development of educational programs including:
 - (1) orientation of new nursing staff.
 - (2) in-service education for all nursing staff.
 - (3) affiliation programs for undergraduate student nurses.
 - (4) affiliation programs for post-graduate student nurses.

As of December 1967 the Provincial Health Department employed 139 public health nurses. Of this number 121 are assigned to health units including Northern Health Services, seven to Care Services, five to Venereal Disease Control, one to Tuberculosis Control and five act as generalized nursing consultants.

Expansion of existing health units in 1967 required additional nursing staff. In January the nurse from Brooklands was transferred to the St. James-Fort Garry-St. Vital Health Unit when her district was added to the health unit services. A nurse was also stationed at Eriksdale January 1, 1967. The opening of an office at Thompson May 1st required the services of two nurses and at Snow Lake September 1st, one nurse on a half-time basis. To facilitate the integration of Treaty Indians on Reservations into health unit programs, Medical Services, National Health and Welfare, seconded a nurse to the Swan Valley Health Unit for one year as a Pilot Project. If successful it is hoped that similar programs may be carried out in other health units. It is apparent that the effectiveness of such a plan depends to a great extent on the attitude of the nurse and her appreciation of a generalized public health nursing program.

The changing role of the professional nurse in health agencies, hospitals, in industry and as a citizen in the community, has emphasized the necessity for proficiency in the art and science of communications. Knowledge and practice in developing such proficiency can be provided through three main channels of staff education -

- (1) Orientation of new staff members.
- (2) In-service education built upon the previous education of the nurse.
- (3) Continuing education for nurses which makes use of educational opportunities outside the employing agency.

The above three facets of staff education are well developed and programmed on a continuing basis under the leadership of the Educational Director. Each new appointee to staff during the year under review, received a two-day orientation period in central office

followed by two to three week experience in a health unit prior to being assigned to her district.

Four in-service educational conferences were held in the urban area with an average attendance of 74, and three conferences were held in rural areas where the attendance averaged 39. Senior nurses from health units attended three conferences to deal with problems specific to this group. A five-day institute for all senior public health nurses was conducted at the Manitoba University School of Nursing in June 1967. This institute was planned jointly by the University Adult Education and Extension Services, the School of Nursing and the Manitoba Department of Health. Senior nurses from the City Health Department, the Victorian Order of Nurses and the Provincial Department of Health, received stimulation and help in meeting their increasing leadership responsibilities.

Forty nurses from health agencies attended a five-day Pre-natal Refresher course conducted by the Maternal and Child Health Nursing Consultant, Federal Department of Health. Also, as in previous years, a prenatal educational conference financed by Federal Health Grant was conducted by the Educational Director and attended by thirty-four nurses. Prenatal classes are now being taught by public health nurses on a continuing basis in 33 health unit centres and by registered nurses in five other centres. In an effort to provide better continuity of care to maternity patients the nursing educational director has continued to act as a resource person to the obstetrical nursing committee of the various hospitals.

During 1967 suburban health unit facilities were made available to one hundred and seventy student nurses from the University of Manitoba. The faculty of the School of Nursing planned, organized

and directed the field practice and health unit nursing staff selected suitable families to be followed by the students and provided help and guidance on request. Forty-two senior student nurses from hospital Schools of Nursing spent two weeks in health units and 179 students received five days affiliation. Three hundred and forty-seven intermediate and junior student nurses visited health units, Care Services and the Health Department, Norquay Building, to observe special areas of service such as child health conferences, mother and child care, sanitation, etc.

Day Nurseries

Applications for permit to operate a Day Nursery are processed by Public Health Nursing Services upon the recommendation of the Medical Director of the Health Unit. A satisfactory report from the fire inspector, public health nurse and health inspector is required. During 1967 twenty permits were issued to Day Nurseries in Health Units. Revised regulations regarding the operation of Day Nurseries should facilitate the effective operation of these institutions. Although fulfilling a community need, maximum benefits from such programs cannot be realized until instructors are well prepared to work with the pre-school child.

Tuberculosis Control

The maintenance of a central registry for tuberculosis is the responsibility of a public health nursing consultant, who also assists in planning tuberculosis clinics and follow-up and acts as liaison between hospitals and the community. As health units take over more of the responsibility for health services to the Indian population, the staff at the registry is becoming more involved in their special aspect of the program.

Venereal Disease Control

In the extremely active area of venereal disease control, a public health nursing consultant and three public health nurses provide an effective service. They interview patients at the clinic; do contact tracing and follow delinquent patients in Metropolitan Winnipeg; and carry out an extensive preventive program at the Manitoba Home for Girls, the Provincial Gaol and Home of The Good Shepherd. During the past year 1,189 contacts to venereal disease were located out of 1,768 persons named as a source of contact. Six hundred and forty eight persons required treatment for gonorrhoea and 112 required treatment for syphilis. Compared with the previous year there was an increase of 19 new cases of gonorrhoea and an increase of 66 new cases of syphilis. One thousand, four hundred and ninety-one home visits were made to delinquent patients for contact tracing and two hundred and twenty-eight visits were made to the three institutions where a total of 904 examinations were done.

In addition to providing service to the community the nurses at the clinic contribute to the educational program for medical students, nursing students, health inspectors, social workers, health educators and public health nurses. Twenty-six medical students, two health educators, thirty-two public health nurses and twenty-seven student nurses sat in on interviews and observed at the clinic during the year. Also, the role of the public health nurse in Venereal Disease control was presented to 99 student nurses, 10 social workers and nine health inspectors as a part of their educational and in-service programs.

Care Services

A nursing consultant and staff of five nurses assigned to Care Services are responsible for assessment and placement of persons requiring some form of care facility, and for the supervision of care being given to 1,375 persons in institutions and 976 in private homes in the community.

One outstanding need in the area of care services was that of training staff in nursing homes. To help alleviate the situation a program of instruction for nursing aides was planned jointly by the staff of Care Services and Public Health Nursing Services, and a registered nurse employed on a part-time basis as instructor. The first course consisting of a series of eight classes given once a week proved so successful that the program has continued throughout the year. To date 84 nursing aides including five men have benefitted from such preparation.

II. Practical Nursing Program

Two courses of education in practical nursing are open to young people in Manitoba. The Central School for Practical Nurses at the Manitoba Institute of Technology and the St. Boniface School for Practical Nurses offer a one year course consisting of four months didactic preparation and eight months clinical experience in hospital.

An alternative program is provided through a three year combined psychiatric and practical nursing course offered at Brandon and Selkirk Hospitals for Mental Diseases and the Manitoba School for Retardates at Portage la Prairie.

In September 1967 the St. Boniface School for Practical Nurses was moved from Hospice Tache to the St. Boniface Cultural

Centre. The new facilities, while not providing for more students, does provide more spacious and suitable quarters for both staff and students. St. Boniface School, therefore, will continue to recruit 45 students for each January and August class. The Central School at M.I.T. has continued with the increased enrolment begun in 1966.

Responsible for licensing of practical nurses and the development and administration of the educational program, the Registrar-Consultant reports that there are at present 544 students enrolled in the one year course and 99 in the three year combined course. Sixty-two other students are completing requirements for licensure. This applies to persons coming from outside Manitoba who require additional courses; nurses whose registration has lapsed and are returning to active practice and students who are unable to continue in the registered nurse program.

It is interesting to note that more Eskimo and Indian girls are entering the practical nurse course. Two Eskimo girls were enrolled in May 1967. Two other Eskimo girls have been accepted for April 1968 and two for August 1968 classes. An average of two to three Indian and Metis girls enter each class. Most of the Eskimo students and some of the Indian and Metis girls have difficulty in adjusting to classroom setting and require some extra help. If necessary, they are given an opportunity to repeat the preclinical period.

During 1967 there were 1,750 licenses issued to practical nurses and 456 provisional permits granted to graduates awaiting licensure. Three thousand nine hundred and sixty practical nurses have been licensed in Manitoba since the establishment of the course in 1945.

Mobility among practical nurses continues with Manitoba graduates accepting employment elsewhere and a steady stream of Certified or Registered Nursing Assistants seeking licensure in Manitoba.

Since the Nurses' Directory closed in 1962 the Registrar-Consultant and staff have continued to make available names of practical nurses to persons requiring home nursing services. Approximately 50 Licensed practical nurses are employed in homes in Greater Winnipeg on a regular basis.

PUBLIC HEALTH NURSING SERVICES

I. Staff:

Number of public health nurses on staff as of Dec. 31, 1966....138
Number of resignations during 1967..... 38
Number of appointments during 1967..... 49
Total number of public health nurses on staff as of Dec. 31/67.139
Number assigned to Local Health Units as of Dec. 31, 1967.....121
Number assigned to Venereal Disease Control..... 4
Number assigned to Care Services..... 6
Number assigned to Tuberculosis Control..... 1
Number assigned to Central Office....7 (Director -
(Educational Director
(Generalized Public
(Health Nursing
(Consultants.....5
Number of nurses on study leave..... 11
Number of nurses on extended sick leave..... 3

Educational Preparation of Public Health Nursing Staff:

Number with degrees.....17 - 12.2%
Number with diploma in public health nursing....57 - 41. %
Number with registration only.....65 - 46.7%

II. Educational Program

(a) Institutes held under Federal Grants:

	<u>Number Held</u>	<u>Staff Attendance</u>
Institute for Senior Nurses....	1	28
Pre-natal Institutes.....	2	74

(b) Staff Educational Conferences held:

Urban.....	4	296
Rural.....	3	117
Senior Nurses.....	<u>3</u>	<u>69</u>

(c) Graduate Student Program:

Number of
Students

Public Health Nursing Students..... 170

50 carried over from 1966.

(d) Undergraduate Affiliation Program:

<u>Number of Students</u>	<u>Length of time</u>
18	1 day
35	1 day
37) 19	2 weeks
) 18	1 week

Brandon General Hospital - Junior

" " " - 2nd year

" " " - Senior

St. Boniface General Hospital

Junior Students 80 $\frac{1}{2}$ day

Intermediate Students 40 1 day

" " 10 $\frac{1}{2}$ day

Senior Students 25 5 days

Misericordia General Hospital

Junior Students 37 $\frac{1}{2}$ day

Intermediate Students 42 $\frac{1}{2}$ day

Senior Students 37 5 days

	<u>Number of Students</u>	<u>Length of time</u>
<u>Victoria General Hospital</u>		
Junior Students	24	$\frac{1}{2}$ day
Senior Students	24	5 days
<u>Winnipeg General Hospital</u>		
Senior Students	34	5 days
<u>Grace General Hospital</u>		
Junior Students	38	$\frac{1}{2}$ day
Intermediate Students	20	1 day
Senior Students	64	5 days
<u>University of Manitoba</u>		
Undergraduate students enrolled in 4 year degree program	170	

Summary - Student Nurse Affiliation - January 1 to December 31, 1967

Total number of Junior Student Nurses	197
Total number of Intermediate Student Nurses	153
Total number of Senior Student Nurses	221
Total number of Post-Basic University of Manitoba Students	<u>170</u>
TOTAL	<u>741</u>

* Increase due to calculating number of junior students who observe health facilities in Norquay Building. Number of University of Manitoba Students should continue to increase each year.

III. Generalized Public Health Nursing in Non-Health Unit Areas -
 January 1, 1967 to March 31, 1967

Home Visits

 Number of visits made for health instruction
 and demonstration. 29

School Health

 Number of school children examined and
 conferenced. 153

Immunizations

 Diphtheria-Tetanus. 1,863

IV. Practical Nursing

 Staff:

 Registrar-Consultant
 Nurse Instructors . . . 8*
 Nutritionist 1

*Instructors alternate between classroom and the field. Four are in
classroom at Manitoba Institute of Technology and four provide
clinical supervision to students in Manitoba Hospitals.

V. Practical Nurse Statistics - January - December 1967

<u>One Year Course</u>	<u>Central School</u>	<u>St. Bon. School</u>	<u>Total</u>	<u>Increase or Decrease</u>
Students enrolled in 1967	275	89	364	-11
Students who withdrew	37	10	47	+14
Students (1967) remaining in course	238	79	317	-25
Students (1966) still in course	150	77	227	
Total Students proceeding in course 1967.	388	156	544*	

VI. Three Year Combined - Psychiatric and Practical Nurse Course

	<u>Brandon Mental</u>	<u>Selkirk Mental</u>	<u>Portage Mental</u>	<u>Total</u>	<u>Increase or Decrease</u>
Students enrolled in 1967	27	22	11	73	+12
Students who withdrew	23	10	0	33	+ 3
Students (1967) remaining in Course.	4	12	11	27	-20
Students (1965 and 1966) in Practical Nurse affiliation	19	29	24	72	-20
Total Students proceeding in Course during 1967. . . .	23	41	35	99*	

VII. Part-time Students - completing requirements for licensure

Partial Registered Nurse Course	19
Registered Nursing Assistant, Certified Nursing Assistant, State Enrolled Nurse and others from outside Manitoba.	29
Total students proceeding in course (1966-67)	48*
Manitoba Licensed Practical Nurses completing require- ments for re-establishment of licenses	14*
Total Number of Students in Practical Nurse Course (1967).	705

VIII. Statistics - State Board Test Pool Licensing Examination

Eligible candidates (April and September examinations) (Completed course):

One Year course.	348
Three Year Combined Course.	36
Part-time Students for licensure.	43
Total Number Candidates eligible for examination .	427

Successful Candidates:

	(one year...305)	
Of 376 Manitoba Course students - three year	28)	333
Of 22 Practical Nurses from outside Manitoba . .		18
Of 17 Students with partial Registered Nurse Training .		15
Of 415 Total candidates, successful were		356
Failure Rate	14.3%	

IX. Statistics re Licensure of Practical Nurses:

Provisional Permits issued in 1967 456

Provisional Permits exchanged for licences -

- New 130

- Re-established 5

Total Licences for Permits . 135

Licences issued in 1967:

- New 90

- Renewed 1660

Total 1750

DENTAL SERVICES

The Dental Services Section of the Health Services Division is designed to assist Manitobans in improving their level of dental health. This is accomplished through dental health education programs, studies on dental health problems, promotion of use of effective dental public health measures and under certain conditions by provision of support to dental treatment programs.

Headquarters for dental services are located in the Norquay Building in Winnipeg. The Administration organisation is composed of a Director and four Regional Dental Directors. Regional offices service four large geographic areas of the Province. Region I covers the entire north country and is based in Dauphin; Region II includes the Health Units and non-Health Unit districts to the southwest; Region III the interlake area; Region IV the south east portion of the Province. The directors of these regions are highly qualified dentists with post-graduate training in dental public health administration.

Program Activities

Prevention and Diagnosis:

- Encouraged fluoridation of communal water supplies.
- Provides topical fluoride application for children at health unit clinics.
- Carries out dental inspection and referral for school children in areas where private dentists are practising.
- Develops preschool round-up programs of topical fluorides and parent counselling.
- Conducts annual school dental inspections and notification of dental needs in municipalities and towns participating in the dental treatment program provided through the health department.

- Provides oral cytology, dental inspection, and referral of institutional aged and infirm. A detailed dental report on this program is available on request.

Dental Care

Dental Services administers and operates mobile dental units to provide fillings, extractions and prophylaxis for children in rural areas where no dentist is practising. This program is co-sponsored by a Municipality or local agency on a per diem rate, the balance subsidized by the Department of Health. There is no means test. Dental care is available "free" to all children in a community utilizing the health department's clinical services (Indian, Medicare and Welfare included).

The basic treatment program includes:

1. Emergency service for all children (relief of pain and infection).
2. Incremental program, commencing with the pre-schoolers, Grades I, II, III, etc. Extension of this service is dependent upon funds available and the size of the project.
3. Six to eight month recall or return visits to an area to provide a community with regular dental services.

A maximum period of two weeks has been established for clinics. This allows for expansion of service and a fair distribution of manpower.

Dental Services also co-operates in the staffing of Health Unit dental programs of Metropolitan Winnipeg Suburbs and offers summer treatment clinics to interested communities. Success of summer treatment clinics is dependent on community co-operation.

Dental Health Education

Dental Services places major emphasis on public education.

This is accomplished through:

- Development and distribution of audio-visual aids and printed materials.
- Presentation of talks and lectures to civic groups, parent-teacher groups and lectures to school children.
- Teachers' conferences are attended and table displays presented on dental education material available from the department. Matters pertaining to dentistry for children are also discussed with teachers.
- Information on dental health programs is disseminated to dentist, teachers, college students, auxiliary groups and others.
- Staff participates in the Dental Assistant Course sponsored by the Manitoba Dental Association.
- A Travelling Lending Library service has been established including a series of 14 texts on dental topics of interest to various school grade levels. The projects has been supported by the Manitoba Dental Association by a donation

of similar texts to all public libraries throughout the province.

- Seminars, conferences, lectures and panel discussions are held with school teachers, nurses and dentists (rural and urban).
- Contributions were made to the public health lecture series of the Dental College, School of Dental Hygiene, Brandon Teachers' College, University of Manitoba Faculty of Education, Nurse Training Hospitals in Winnipeg and local dental societies.
- Dental assistants function as dental health educators in rural areas containing small schools. Dental Assistants outline dental educational material available through the Department of Health and utilize films and audio visual aids available.

Public Health Education and Training For Professionals

- Seminar programs are provided for dentists in rural Manitoba including clinical presentations by outstanding dentists in Manitoba.
- Staff conferences, in-service education and training for personnel of the Dental Section are held routinely.
- Orientation conferences for health department staff are provided.
- On-the-job training for dental assistants is provided in clinics operated by the Dental Section.

- An indoctrination program of a two week period is offered to dentists in the Province interested in obtaining information on public health dentistry and the program of the Province.
- A monthly seminar program is provided to dental assistants concerning promotion of dental health educational material.
- Field training experience for fourth year dental students and second year dental hygienists is offered by Dental Services.

Program Development

Consultative services are provided to local dental clinic programs and efforts are directed toward the encouragement of private practise dentists to participate.

Plans are available to attract full time or part-time dentists on a volunteer basis to help provide services for rural Manitoba and these plans provide for various alternatives. These include:

1. Full time employment (private practise privileges).
2. Per diem employment (6 hour clinical), with supporting services and facilities such as dental assistant, transportation, private practise privileges, supplies and equipment.
3. Provision of portable dental equipment which is transported and set up in a location of choice of a dentist and includes a set of dental instruments. This plan allows for private practise on a fee for service basis.

4. Establishment of satellite dental offices equipped with modern dental equipment - e.g. (MacGregor, Lundar, Hamiota). Also permits private practise on a fee for service basis.

Other specific program activities include:

- Consultation and assistance to health units in developing community dental health programs.
- Assistance in the planning of the construction of dental facilities in institutions, health units, and schools.
- Provision of consultative service to other divisions of the Health Department, Department of Education, Attorney-General's Department and the Department of Welfare.
- Administrative support to bursary program for undergraduate dental students and hygienists to financially assist them in attaining an educational goal. In return the bursary students are committed to serve in rural Manitoba as a private practitioner or a staff appointment with the Dental Services in the department.
- Administrative support to a post-graduate training program for staff dentists in public health courses leading to a diploma in dental public health.
- Liaison between communities interested in obtaining a new dental graduate to practise in their community. This

involves field trips and meetings with town officials and rural development people.

Research and Study Projects

With respect to this area, Dental Services:

- Conducts pre and post fluoridation studies.
- Evaluates dental manpower levels in the Province and encourages dentists to locate in areas of low dental manpower.
- Participates in projects with the Manitoba Dental College and is concerned with dental facilities in Manitoba hospitals and geriatric dental problems in nursing homes.
- Assists in resolving the shortage of dental manpower and facilities in rural Manitoba.
- "Operation Frontier" - provides dental health services co-sponsored by the Departments of Education, Health and Manitoba Dental Association at an isolated rural up-grading school in the North.
- Conducts studies on oral health of Winnipeg Suburban Grade I school children.
- Attempts to develop satellite dentistry for rural Manitobans.

Dental Activities in Other Provincial Agencies

Department of Education

Through co-operation of the Department of Education, Dental Services develops consultive and dental health education programs and provides dental equipment and emergency dental service for Frontier

School, Cranberry Portage. Dental treatment is provided on a fee for service basis by private dental practitioners of Manitoba.

Department of Welfare

Assistance is provided to the Vocational Opportunity Bureau and Social Assistance in program planning and in the provision of dental treatment using private dental practitioners.

Also, medicare children are included in the treatment program provided in a school or community by the Department of Health.

Attorney-General's Department

Receives assistance in obtaining dental treatment from private dental practitioners.

Psychiatric Service

Assistance is provided to this division in hiring of dental employees and in program planning for institutions. A dental treatment program is also provided for St. Amant Ward.

West-Manitoba Regional Development Incorporation

Dental Services acts in an advisory capacity to this organization in encouraging undergraduate and graduate dentists to explore private practise opportunities in Western Manitoba.

Indian Affairs

All Treaty Indian children attending integrated schools are included in the dental treatment program. Treatment clinics are also held in certain selected schools of the Province sponsored by Indian Affairs.

DENTAL SERVICES

I. PREVENTIVE AND DIAGNOSIS

Fluoridation: 61% of provincial population

91% of provincial population on
communal water supply

New communities fluoridating 1967 - Russell

Baldur

Provisional Certificate issued for fluoridation - Deloraine

MacGregor

Reston

Topical Fluoride Programs (Hygienists)

Region II

Arden

Brandon

Glen Souris

Hamiota

MacGregor

Pilot Mound

Portage

Plumas

San Clara

Region III

Moosehorn

Kildonan-St. Paul
Health Unit

Region IV

St. Pierre

Arnaud

Frontenac

St. Malo

St. James-St. Vital-

Ft. Garry-Charleswood
Health Unit

St. Boniface Health
Unit

Total number of patients appointed 3,398

Number of failed appointments 457

Number of prophylaxis 2,902

Number of topical fluorides 2,964

Number referred for dental treatment. 1,893

Number of parents counselled 2,234

School Dental Inspection Team 1966-67

Health Unit #23	1,541
Health Unit #25	2,075
St. Boniface Health Unit	1,608
Total	<u>5,224</u> children

II DENTAL CARE

Clinic Locations - Dental Treatment provided

Region I

Barrows-Westgate	Gillam
Cormorant	Harlington School, Swan River
Cranberry Portage	Pelican Rapids
Crane River	Sherridon
Duck Bay	Wabowden

Region II

Brookdale (R)	Pilot Mound
Elie	Plumas
Hamiota (R)	San Clara (R)
Lansdowne (Arden) (R)	Blumengart Colony, Plum Coulee
Miniota (R)	Bon Homme Colony, Elie
North Norfolk	Fairholme Colony, Portage
Huron Colony, Elie	Pembina Colony, Darlingford
Milltown Colony, Elie	Spring Valley Colony, Glen Souris
New Rosedale Colony, Portage	Sturgeon Creek, Headingly

* (R) 6-8 month recall service

Region III

Ashern (Pioneer
School) (R)

Berens River

Dog Creek

Easterville

Fairford

Fisher Branch

Grahamdale (3)

Grand Rapids (R)

Kildonan-St. Paul

(Springfield
Heights

(New Rosewell

(Seven Oaks

Lundar (R)

Manigotogan (Hole River
Reserve) (R)

Moosehorn (R)

Clearwater Colony, Balmoral

Ridgeland Colony, Dugald

Springfield Colony,

Anola

Region IV

Charleswood (Chapman School)

DeSalaberry (4) R *

East Braintree

Fort Garry

Hadashville

Ridgeville

Rosenfeld

St. Amant Ward

St. Boniface

St. James

St. Vital

Transcona (Radisson School)

Crystal Springs Colony,

St. Pierre

* (4) Number of locations

(R) 6-8 month recall service

Mobile Dental Clinics

Number of Clinic Days	507
Number of Clinic Locations	66
Number of Children Treated	4,362
Number of Children Dental Appointments.	6,070
Number of Children Completed.	1,464

Dental Treatment

Exodontia (2,968)	Deciduous teeth	2,558
	Permanent teeth	410
Number of Filled Teeth	Deciduous teeth	1,800
(4,356)	Permanent teeth	2,556
	Treatment fillings. . .	153
Prophylaxis	Dentist	67
	Hygienist	2,902
Topical Fluoride	Dentist	3
	Hygienist	2,964
Other Treatment	. . . . .	210
Parents Counselling	Dentist	685
(2,919)	Hygienist	2,234

Clinics for Indian Affairs

Little Saskatchewan School (Fairford)

Fairford School (Fairford)

Lake Manitoba School (Vogar)

Hole River, Manigotogan

Berens River

Easterville

Brokenhead (Scanterbury)

Steadman

Lake St. Martin

III. DENTAL HEALTH EDUCATION

Municipalities or Towns included in the program 1967

Region I

Duck Bay	Pine River
Snow Lake	Ethelbert
Wabowden	Winnipegosis
Thompson	Mafeking
Flin Flon	Pelican Rapids
Cranberry Portage	Barrows
The Pas	

Region II

Blandshard	Neepawa
Brandon	North Cypress
Carberry	Odanah
Clanwilliam	Pembina
Cornwallis	Pipestone
Daly	Rosedale
Elton	Saskatchewan
Lansdowne	Sifton
Louise	Whitehead

Region III

Grahamdale	St. Clements
Coldwell	Siglunes

Region IV

Brooklands	Reynolds
DeSalaberry	Rhineland
Franklin	St. Boniface
Hanover	Springfield

III Dental Health Education - cont'd.

Classroom Health Education Programme - Grades I-VIII

	Director	Hygienist	*Dental Assistant	Total No. Children	No. Classrooms	No. Schools	No. Municipalities
I Rural	000	000	7,125	7,125	275	29	10
II Rural	000	2,389	4,195	6,584	335	54	18
III Rural	215	00	836	1,051	37	12	3
Wpg.Health Units	60	909	656	1,625	58	9	1
IV Rural	2,100	120	900	3,120	64	19	9
Wpg.Health Units	00	1,800	240	2,040	68	23	2
TOTALS	2,375	5,218 **	13,952	21,545	837	146	43

837 Classrooms visited

21,545 children included in the programme

** Does not include School Dental Inspection 1966-67 -5,224 children

* Dental Assistant programme commenced October 1967

PUBLIC HEALTH LABORATORY SERVICES

The Provincial Public Health Laboratory is located on the third floor of the Medical College Building, corner of Bannatyne Avenue and Emily Street and is known as the Fred T. Cadham Public Health Laboratory. The chief function of this laboratory is to provide practising physicians, public health officers and others in the health field, with laboratory facilities for investigations which are primarily related to public health.

Besides the facilities in the Medical College Building, the Cadham Laboratory also administers several branch laboratories dealing with sanitary bacteriology. The latter are mainly responsible for examinations of milk and milk products and water. They are located in the Norquay Building, the Brandon Mental Hospital and the Health Unit Building at Dauphin. The work load of the Public Health Laboratory Services calculated in D.B.S. units for the years 1966 and 1967 is as follows:

<u>Work Load</u>	<u>1966</u>	<u>1967</u>
D.B.S. units from the Cadham Public Health Laboratory	481,532	549,089
Units from Sanitary Section	51,811	53,516

PROGRAMS

Microbiology

The Cadham Public Health Laboratory has a major department devoted to diagnostic and public health microbiology. This department is broken down into sections covering mycology and parasitology. A large proportion of the specimens submitted to this section are from physicians in rural practices and rural hospitals which lack diagnostic bacteriology facilities. Certain bacterial infections of

public health significance which are diagnosed in this section or elsewhere, may result in the examination of manifold specimens submitted to the laboratory from potentially infected contacts. Examples would be contacts of cases of diphtheria, typhoid, tuberculosis and enteric infections such as Salmonellosis and Shigellosis.

Besides providing diagnostic facilities to determine the presence of bacterial, fungal or parasitic pathogens, necessary sensitivity testing is conducted when indicated to enable the attending physician to use the appropriate antibiotic in eradicating the offending pathogen. The laboratory works in close contact with the Director of Preventive Medical Services by assisting him to investigate contacts and thereby detect possible carriers of infectious diseases in the community.

Even in the year 1967, despite the excellent public health measures that have been incorporated in this province over the years in the form of toxoiding of newborns and schoolage children, diphtheria cases and carriers continue to be identified through this laboratory's diagnostic facilities.

This section also serves as a reference laboratory for outside institutions where preliminary or incomplete identification of bacteria are made which may require serologic procedures or animal inoculations for complete identification. The Cadham Laboratory also enjoys the consultative services of the Laboratory of Hygiene in Ottawa for certain bacteriologic and serologic identifications and co-operates with this Federal agency in providing a statistical summary of certain significant isolations made in the Cadham Laboratory so that the incidence of these infections may be identified across the country.

Isolations of beta-Haemolytic streptococcus Lancefield group "A" continued to be made in increasing numbers during the year, a continuation of the trend that was noticed in the latter part of 1966. Most of these isolations have been sent to the Laboratory of Hygiene in Ottawa where strain identification has been made by M & T antigen typing.

The bacteriology section has a smaller unit where examinations are done for the presence of the bacillus responsible for human tuberculosis and for other similar bacilli which have been isolated in increasing frequency in the last few years and are thought to be, in some instances, pathogenic to man. This section also conducts investigations for determining the presence of the bacterium responsible for gonorrhoea and works in close contact with the Director of Venereal Disease Control on examinations of this type.

During the past year, because of a marked decrease in the indication for phage typing of staphylococci, this work was dropped and where indicated, isolates of staphylococci were sent to the Laboratory of Hygiene for phage typing.

Sanitary Bacteriology:

Sanitary bacteriology refers to standard techniques which are performed on milk and milk products and water to determine their safety for human consumption. These tests are conducted at a branch section in the Norquay Building and in a section of the Laboratory of the Brandon Hospital for Mental Diseases and in the northwest part of the province at the Dauphin Laboratory and X-ray Unit. Examinations of this nature are conducted on a routine scheduled basis in co-operation with health officers and sanitary inspectors.

Examinations on water are largely done on samples from municipal supplies but, in addition, samples are submitted by sanitarians from private wells, fresh water streams, springs and rural municipal supplies. In the summer months the Norquay Building Laboratory handles a very increased work load due to the sampling of wading pools, modified and conventional swimming pools and waters from local Lake resorts. River waters and sewage are also examined upon request and the laboratory has been providing examinations requested by the International Joint Commission to determine the extent of fecal and other sources of contamination at various sampling sites along the Red River extending from the international border to the northern boundary of the City of Winnipeg.

Milk examinations are performed in the sanitary bacteriology section on pasteurized milk and milk products and raw milks from rural areas as well as from the City of Winnipeg milk shed. The Department of Health through the laboratory services now exclusively examines raw milk products in the province for bacterial content.

Restaurant eating utensils such as cutlery and pottery are examined for adequate cleansing by the swab rinse technique in this section upon request. The sanitary section has also been of assistance to the Manitoba Rehabilitation Hospital since its opening, by providing swab rinse examinations both for ordinary pathogens and tubercle bacilli to determine the efficiency of cleansing procedures employed on cutlery and pottery.

Syphilis serology:

The Cadham Laboratory exclusively examines all blood specimens submitted by physicians for examination for the presence of antibody to the spirochaete responsible for the venereal disease,

syphilis. Examinations are performed chiefly on blood serum samples but in some instances spinal fluids are submitted for the same testing. All requests for this type of examination come from physicians and reporting is made only to physicians. An initial flocculation type screen test is done on all samples known as the V.D.R.L. Sera which are reactive by this procedure are examined further by a complement fixation technique known as the R.P.C.F. test. Where indicated, a third examination known as the T.P.I. may be done on a specimen. The latter test is considered to be the most specific for syphilis in widespread use today and is the yardstick by which other more simply performed tests are evaluated. Because of diminishing indications for employing this test in the last few years, samples are submitted to the Central Public Health Laboratory in Ontario as it is uneconomic to continue with this test locally for the number of examinations required.

The Cadham Laboratory hopes to add to its battery of diagnostic procedures, the F.T.A. 200 test, in the next fiscal year and accordingly has requested funds for purchase of a new ultra violet light microscope. This test, an immune-fluorescence procedure, is reputed to be also highly specific for antibody to the spirochaete of syphilis and is much more rapid and easier to perform than the T.P.I. Many public health laboratories have already incorporated this procedure into their routine.

Specimens are usually received for syphilis serology for diagnostic purposes although in some instances they are required by law for premarital and visa purposes. In other instances they may be ordered as a screening procedure, as part of a prenatal or pre-employment examination or as a guide to therapy in a known case. The

laboratory staff works in close co-operation with the Director of Venereal Disease Control in tabulating serological findings and reporting these on a weekly basis to Venereal Disease Control. In addition, the serological findings on patients attending the Provincial Venereal Disease Clinic are correlated where possible with the clinical findings in order that knowledge may be gained in the interpretation of serological findings as related to various stages and manifestations of illnesses.

Non-Syphilis serology:

Specimens sent for syphilis serology, when identified from pregnant women, are later forwarded to the Rh laboratory for identification of Rh and other antigenic blood factors. Blood samples may also be submitted to the Cadham Laboratory to determine the presence of antibodies associated with rheumatic diseases, enteric fevers such as typhoid and paratyphoid, salmonellosis, brucellosis and infectious mononucleosis.

Food examinations:

Examinations for the detection of possible food borne bacterial pathogens are done in close co-operation with the Food Control section. Wherever possible, a preliminary investigation into the complaint is undertaken by Food Control. Most examinations are done on food samples which are suspected as the cause of a food poisoning incident although some examinations may be undertaken on new types of processed foods which are about to be or have recently been introduced on the market, especially where the nature of the product might make it a potential vector of bacteria associated with food poisoning. It is hoped that some original applied research into the detection of staphylococcal enterotoxin may be pursued during the next year.

Clinical Pathology:

Included in this program are chiefly clinical chemistry examinations and the examination of peripheral blood and bone marrow smear preparations. Diagnostic clinical chemistry estimations are performed at the Cadham Laboratory and at the Brandon Hospital for Mental Diseases to supplement those services that are provided at the local level in Laboratory and X-ray units. The Cadham Laboratory has accepted most of the clinical chemistry estimations from the Manitoba Rehabilitation Hospital as this institution has not at present the laboratory space to perform clinical chemistry estimations. The Director of Laboratory Services is a consultant to the Manitoba Rehabilitation Hospital on laboratory services.

New Programs:

Aminoacidopathies in the newborn:

This program has been expanded in the past year from the province-wide Guthrie testing for the disease known as phenylketonuria to the province-wide screening by chromatography techniques for many other aminoacidopathies including P.K.U. The latter illness, hereditary in nature, is due to the absence of a specific enzyme responsible for the proper metabolism of a component in serum known as phenylalanine. If this illness is not detected early enough in the newborn and dietary adjustments made, it can lead to brain damage and mental deficiency. Other inborn metabolic disorders which may be picked up by our chromatographic screening technique may also lead to mental and other organ disorders if not detected early enough and appropriate dietary corrections employed. This program is certainly in line with our philosophy that the challenge of the future for public health laboratory services is the provision of the facilities to the

community in terms of human morbidity and mortality. These illnesses are also a handicap to the community in terms of diminished productivity as well as presenting a heavy economic burden for care.

CONSULTATIVE SERVICES

Reference bacteriology

This service is provided to physicians and hospitals throughout Manitoba. The complete identification of salmonella species is an important reference function that the Cadham Laboratory provides. This laboratory encourages all other bacteriological laboratories in the province to forward isolates for complete identification and tabulation so that we may provide the epidemiologists with statistics as to the incidence and sources of salmonella isolates in the province at all times. The laboratory co-operates with the provincial veterinarians when requested to aid in the investigation of epizootics and in the examination of animal foods for possible salmonella contamination. Salmonella typhi murium and Salmonella newport continue to be the most commonly isolated species during the past year.

Laboratory supervision and training:

The Cadham Laboratory and the laboratory at the Brandon Hospital for Mental Diseases provide backup diagnostic services for all rural laboratory and X-ray units. Technical assistance and consultation is provided by a scientist at the Brandon laboratory. This laboratory co-operates in arranging yearly refresher courses in medical technology for all technicians employed in diagnostic laboratory and X-ray units. A permanent committee meets regularly to consider technical and administrative problems arising in laboratory and X-ray units. The Cadham Laboratory offers limited affiliation in certain laboratory

disciplines to student technicians from both in and outside the service. Training and experience gained at the Cadham Laboratory may be used as credits towards an advanced registered technician's certificate. Senior personnel of the Cadham Laboratory are encouraged to take periodic inservice training which will be of benefit to the service. The Central Laboratory arranges promotional examinations in medical laboratory technology twice yearly for technicians on establishment and for those working with local health services. The Central Laboratory also participates in an educational program for medical students and physicians preparing for laboratory specialties. Senior staff also give instruction to graduate students and undergraduate medical students in the University departments of Bacteriology and Preventive Medicine.

VIRUS DIAGNOSTIC UNIT

During the year the virus diagnostic unit, which was formerly under the administrative control of the University of Manitoba, became another unit of the Cadham Public Health Laboratory. This addition will lead to a vast improvement in services offered by the public health laboratory.

The virus unit commenced a project in September aimed at detecting the antibody titre of various age groups of both sexes and from various areas in the province to the virus responsible for Western encephalitis. This project is well under way and will continue into 1968. Sera sent in for serological testing for syphilis are being used for this investigation. During the year a representative from the virus unit visited the Connaught Laboratories and the Central Provincial Laboratory in Toronto to seek out information on new techniques in virus isolation and serologic investigation. It is antici-

pated that an overhaul of tissue culture cell lines may be made in 1968 and that micro-techniques may be employed in serologic investigations. Specimens sent in by physicians for bacteriological examinations, proving negative for bacterial pathogens, are often forwarded to the virus unit for investigation there. In some instances a responsible virus is isolated.

The virus unit introduced the following new tests during the year:

1. The Bolin latex fixation test for infectious hepatitis and infectious mononucleosis.
2. The infectious mononucleosis spot test (horse red blood cells)
3. A *Mycoplasma pneumoniae* complement fixation test.
4. A rubella haemagglutination inhibition test.

Virus Diagnoses

Respiratory viruses:

Adenovirus infections accounted for the largest number of respiratory virus identifications (85 positive laboratory diagnoses). These isolations were made in all months of the year with the months of January and February predominating. Influenza A occurred sporadically during the year. There were seven positive serological diagnoses made and no epidemic occurred as was forecast. Sporadic isolations of influenza B totalling six in number were made during the year and sixteen positive serological diagnoses for para-influenza 3 were made, all with one exception from children under ten years of age. The symptoms were mainly bronchiolitis and pneumonia and cases occurred during all months of the year. Thirteen respiratory syncytial virus serological diagnoses were made mainly in children under one year of age and symptoms were usually pneumonia. Five diagnoses of primary

atypical pneumonia were made, all in adults over thirty years of age who had respiratory symptoms with spiking fevers and pneumonia. Eight diagnoses of psittacosis were made, all in adults where symptoms were chiefly pneumonia and one with pleurisy. Twenty five serological diagnoses of mumps were made, mostly in young adults in whom complications such as encephalitis (8) and orchitis (2) occurred. In December there appeared to be an epidemic of mumps in school children in Winnipeg.

Rubella:

Fifteen serological diagnoses were made at the Laboratory of Hygiene in Ottawa. The haemagglutination inhibition test was introduced in the latter part of the year and appears to be a simple rapid test applicable to a diagnostic laboratory. Results obtained so far compare favorably with those obtained by the Laboratory of Hygiene at Ottawa and Connaught Medical Laboratories and this test is now in current use.

Enterovirus infections:

Fourteen polioviruses were isolated from infants under one year of age. It is thought that all are likely Sabin vaccine strains. Six of these isolates have been sent to Ottawa for marker studies to determine if they are wild or vaccine strains. The isolations were made from children who have not been vaccinated not had they been in contact with a recent vaccine.

Echo virus:

For echo virus 71 diagnoses were made. Most of the isolates came from children under age ten and approximately half of these were Indian children from all parts of Manitoba. The other half of the cases were from the Children's Hospital. The predominating symptoms

were diarrhoea and in some instances, respiratory involvement. Echo type 14 was the most common isolate. The majority of cases occurred in the late summer months. Many of the echo viruses were not completely identified and were sent to the Laboratory of Hygiene in Ottawa. A recent communication states that this laboratory was also unsuccessful in making an identification and has in turn forwarded them to the Communicable Disease Centre in Atlanta, Georgia. Fifteen identifications of Coxsackie B infections were made and twelve serological identifications of Coxsackie B3. Most of the cases occurred during the late summer months.

Western Encephalitis:

One serological diagnosis was made.

Research:

Western Encephalitis: A grant has been obtained to conduct a survey on the incidence of Western encephalitis antibody in the population of Manitoba. Two thousand serum samples are to be collected from different parts of the province and are to be tested by the neutralization test for antibody. To date 300 specimens have been tested and approximately five percent were found to have antibody to Western encephalitis virus. All sera tested to date have come from the Winnipeg area.

PUBLIC HEALTH LABORATORY SERVICES

SANITARY BACTERIOLOGY

Pasteurized milk samples, including branch laboratories at Brandon and Dauphin	....	8,384
Raw milk samples, including branch laboratories at Brandon and Dauphin	....	19,462
Water samples, including branch laboratories at Brandon and Dauphin	....	24,551
Restaurant survey swabs, including branch laboratories at Brandon and Dauphin	....	1,119

SYPHILIS SEROLOGY

Blood specimens received for examination	....	91,981
Cerebro-spinal fluid specimens received for examination -		1,768

Examinations carried out:

	<u>SERUM</u>	<u>CEREBRO SPINAL FLUID</u>
V.D.R.L.	91,981	1,768
R.P.C.F.	2,523	17
T.P.I.	125	(40 positive; 64 negative; 15 doubtful; 6 unsatisfactory)

Premarital blood specimens received (39 of which were reactive) 15,250

NON-SYPHILIS SEROLOGY

A. Rheumatic Diseases

Number of specimens received for:

1. Antistreptolysin Titre	2,705
2. C. Reactive Protein	1,026
3. Latex Fixation	1,594

B. Infectious Diseases

Number of specimens received for:

1. Typhoid, Paratyphoid	(172 of which were of significant titre)	....	446
2. Undulant Fever	(60 of which were of significant titre)	....	425
3. Infectious Mononucleosis	(63 of which were of significant titre)	....	976

DIAGNOSTIC BACTERIOLOGY

A. Bacteriology of wounds, exudates, etc.

Number of specimens received for:

1. General examination	....	12,212
2. Requests for staphylococcal phaging	....	238
3. Antibiotic sensitivity of bacteria	....	10,298

B. Specific Bacteriology

Number of specimens received for:

1. Tubercle bacilli	(92 of which were positive)	....	3,613
2. Gonococci	(418 of which were positive)	....	5,131
3. Enteric Pathogens	(86 Salmonella isolated from human and animal sources)		
	from feces:		
	(90 Shigella isolated)		
	(71 Enteropathogenic E. coli isolated)	....	2,864
4. Diphtheriae	(47 of which were positive)	....	5,494
5. b Hemolytic Streptococci	(483 isolated from nose and throat; 571 isolated from other sites)	....	5,080
6. Mycology	(54 of which were positive)		186
7. Parasitology	(15 of which were positive)	....	367
8. Blood culture	(15 of which were positive)	....	287

HEMATOLOGY

Number of specimens received	305
------------------------------	------	-----

BIOCHEMISTRY

Number of specimens received	5,657
------------------------------	------	-------

PHENYLALANINE EXAMINATIONS

Number of specimens received	16,171
------------------------------	------	--------

Number of Efron tests (1 new case and 1 confirmed in 2-year old child)	7,931
--	------	-------

Number of Guthrie tests	12,307
-------------------------	------	--------

WORK LOAD

* Dominion Bureau of Statistics Units from the Cadham Public Health Laboratory	....	545,975
Dominion Bureau of Statistics Units from the branch laboratories at Brandon and Dauphin	....	<u>56,630</u> 602,605
Dominion Bureau of Statistics Units for the year 1966 was	....	533,343

This shows an increase of 13% for the
year 1967.

- * One Dominion Bureau of Statistics unit is equivalent
to ten minutes of a technician's time.

VIRUS DIAGNOSTIC UNIT

A. COMPLEMENT FIXATION TESTS

Neurotropic viruses 2,842

Western equine encephalomyelitis	51
St. Louis encephalomyelitis	3
Mumps	333
Polio	71

Respiratory Viruses

Para-Influenza - Type I	190
Type II	92
Type III	228
Influenza A/Japan	189
Influenza B/Great Lakes	182
Psittacosis	256
Adenovirus	796
Respiratory Syncytial Virus	174

Rickettsial Diseases

Typhus (Screen)	9
Rickettsialpox	10

Miscellaneous

Measles	111
Herpes Simplex	142
Cytomegalic Inclusion disease	1
Q fever	4

B.	<u>NEUTRALIZATION TESTS ON CELL CULTURE</u>		624
	Poliovirus (three types)	6	
	Coxsackie group B types:		
	B2	10	
	B3	200	
	B4	196	
	B5	174	
	B1-	4	
	A9	2	
	E6	30	
	E9	2	
C.	<u>EXAMINATION OF SMEARS FOR INCLUSION BODIES</u>		29
	Conjunctival smears	4	
	Vesicle fluid, etc.	6	
	Impression smears	19	
D.	<u>SPECIMENS FOR VIRUS ISOLATION</u>		2,171
	Feces	1,123	
	Rectal swabs	179	
	C.S.F.	144	
	Throat swabs, sputa, washings, etc.	291	
	Autopsy material	68	
	Miscellaneous (vesicle fluid, biopsy, etc.	141	
	Hemadsorption tests on monkey kidney cells	225	
E.	<u>ANIMAL INOCULATION</u>		137
F.	<u>COLD AGGLUTINATION TESTS</u>		327
G.	<u>EGG INOCULATIONS</u>		208
H.	<u>HEMAGGLUTINATION-INHIBITION TESTS</u>		12
	Influenza A Denver	6	
	" B/Lee	6	
I.	<u>Q-FEVER CAPILLARY TESTS</u>	10	
	TOTAL NUMBER OF EXAMINATIONS CARRIED OUT IN THE DIAGNOSTIC UNIT	.....	6,360
	TOTAL NUMBER OF SPECIMENS RECEIVED FOR EXAMINATION	.....	4,553

NORTHERN HEALTH SERVICES

Since 1959 an extensive public health and medical treatment service has gradually been developed throughout the 160,000 square mile region north of the 53rd parallel of latitude.

With headquarters in The Pas, a well co-ordinated public health team comprised of nurses, inspectors and medical personnel, have made remarkable progress over the years despite almost insurmountable obstacles.

When Northern Health Services was first established, long-term objectives included:

a) To establish clinical treatment centres in areas where there were no medical practitioners. This has been done in the form of Nursing Stations at Thicket Portage, Wabowden, and Pikwitonei on the Hudson Bay Line and in areas such as Moose Lake, Grand Rapids, and Easterville.

b) Provide trained personnel to work from these locations and in some cases, for a resident Nurse's Aid, Licensed Practical Nurse, or Lay Dispenser with a drug cache on hand to treat where possible, patients attending the clinics.

c) In the field of Environmental Sanitation - to provide methods of human waste disposal, garbage disposal, health education for sanitary environments and to ensure that each community has safe drinking water.

d) To establish good communications between all outlying areas and the base at The Pas. This has been done by means of telephone or Manitoba Telephone System radio telephone.

e) To arrange periodic visits by the medical director and the nurse from The Pas to each area when possible, for clinical treatment of patients and to arrange for the more seriously ill to be chartered to the nearest medical centre.

f) To organize a program of Preventive Medicine, to maintain the immunization status of the community.

g) To endeavour to educate the population, especially Indian and Metis in each area, as to the need for good hygiene in their homes. Staff also provides proper prenatal supervision for expectant mothers and advises on the importance of preventative vaccine, plus regular x-rays as part of the Sanatorium Board's program of Tuberculosis Control.

h) To exercise close scrutiny and follow-up on all cases of Venereal Disease.

i) Extension of public health inspection of restaurants, all food and milk processing establishments and supervision of fish handling and fish camps throughout the numerous small fish stations as part of a program of quality control for Northern Manitoba.

Northern Health Services is now in its eighth year of operation and the program has remained substantially unchanged over the previous year. Some of the important activities in 1967 included:

1) There has been increased supervision of school health activities and organization of tuberculosis and mental health clinics at The Pas.

2) New offices were made available at Churchill in September although staffing with nursing personnel has been difficult.

3) The population at Gillam has increased substantially with rapid development of Kettle Rapids. New offices are being built and will be completed shortly. At present a nurse, stationed in a trailer,

is covering that area.

4) From April to June an Assistant Director was available and regular clinics were undertaken during this period along the Bay Line.

An Anemia Survey was also undertaken in children over the age of five. Incidence of anaemia was not high. A further survey in infants will probably be undertaken when personnel are available.

5) The Nursing Station at Thicket Portage was brought up to date with the addition of plumbing facilities and adequate heating system.

6) Within the Northern Health Services, (Thompson, Lynn Lake, and Snow Lake) joined the Northern Health Unit and these areas now have resident staff and offices. Medical supervision continued to be provided by the Director of Northern Health Services.

NORTHERN HEALTH SERVICES

	<u>THE PAS</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
Venereal Disease (Contacts)		49	113	84
Tuberculosis (Home Visits)		50	186	285
*Diphtheria (Carrier)		N.R.	N.R.	1
Domiciliary visits		20	887	546
Mental Health (Home Visits)		88	166	229
Pre & Postnatal Visits		52	47	43
School Home Visits		107	134	68
Child Health Conferences		52	54	57
*Smallpox Vaccinations		N.R.	N.R.	162
*C.P.T.&P., D.T., Sabin		N.R.	N.R.	2426
*Measles Vaccine		N.R.	N.R.	83
Mental Health Clinics		2	2	4
Total Attendance		N.R.	107	161
Crippled Children Clinics Held - 1		N.R.	N.R.	1 (Attendance-24)
School Children Inspected & Interviewed		1,495	4,648	3,318
* N.R. (Not Reported)				

MOOSE LAKE

School Children Inspected		350
Clinics Held - 5	Attendance	181

GRAND RAPIDS AND EASTERVILLE

	Home Visits Grand Rapids		Office Visits Grand Rapids		Home Visits Easterville		Office Visits Easterville	
	<u>1966</u>	<u>1967</u>	<u>1966</u>	<u>1967</u>	<u>1966</u>	<u>1967</u>	<u>1966</u>	<u>1967</u>
Prenatal	84	132	106	228	41	43	36	27
Postnatal	23	55	37	26	28	13	6	10
Infants	104	89	241	170	244	60	53	61
Preschoolers	207	185	512	609	270	73	64	80
School Child	183	120	541	694	275	44	88	106
Adults	342	325	1358	1797	1000	71	130	601

It is to be noted that the Easterville L.P.N. was only in the area for six months. The Grand Rapids R.N. covered both areas the remainder of the year.

Sanitation Services

	<u>1965</u>	<u>1966</u>	<u>1967</u>
Plumbing Inspections	32	85	59
Sewage Disposal Systems - Private	109	174	72
Mun. Disposal Systems or Water Supply	314	697	346
Public Premises & Public Accommodation	19	50	18
Private Premises	301	538	348
Industrial Premises and Offices	-	10	12
Camps	17	55	55
Bathing Premises	2	7	27
Schools	31	80	28
Vermin and Rodent Control	2	9	23
Ice Cutting and Storage	2	59	20
Waste Disposal Grounds	31	84	49
Nuisances	356	518	87
Institutions & Boarding Homes	14	27	28
Barbershops	18	23	20
Raw Milk Producers	75	133	37
Milk Processing Plants	145	183	84
Food Retail Outlets	28	64	21
Restaurants and Beverage Rooms	77	152	66
Food Processors (incl. Ice Cutt. & bottl. plants)	180	288	149
Food Complaints	6	231	5
Bacteriological Analysis - Water	285	1211	1027
Milk - Raw	156	245	35
Milk - Pasteurized	151	288	155
Food	3	18	6
Swab Rinse Tests	-	10	4
Field Tests (chlorine in Water, Carbon Dioxide)	27	114	15
Butter Fats	244	401	292
* Meetings Attended or Held	N.R.	N.R.	36
* Presentations Given	N.R.	N.R.	4

* N.R. - (Not Reported)

EMERGENCY HEALTH SERVICES

Emergency Health Services is a branch of the Emergency Measures Organization. It is the first full year of operation under the Department of Health and in the Health Services Division.

Expenses for the two staff members plus 25 percent of the Director's salary and total travelling costs pertaining to prepositioning of Medical stores is 100 percent recoverable from Emergency Health Services, Department of National Health and Welfare.

Emergency Health Services co-ordinates the planning of government health divisions within the Department of Health in emergency functions as well as the Medical and para-Medical Associations and other groups outside of government. The service co-ordinates the activity of all these groups for operational purposes to cope with local and national problems involving requirements beyond local resources.

Considerable effort is expended in "Continuity of Government" planning which requires a readiness program involving the movement of key personnel to pre-selected sites, the storage and maintenance of essential records and an organizational structure down to the Municipal level.

Plans have been finalized covering most areas of Manitoba and the remainder are nearing completion. The Municipal plans are closely linked with Hospital Disaster planning which to date has involved 50 percent of the Manitoba Hospitals. These are held in conjunction with municipalities, the Fire Commissioner's office, Hospital Commission

and associated hospitals, and the Emergency Measures Organization. The objective of such training is to ensure an instant response capability from local resources in all areas of the province. Through Care Services each Nursing Home is now encouraged to maintain a readiness plan for disaster.

Training is the second main function of Emergency Health Services. First Aid training is conducted by the St. John Ambulance. Home Nursing and Hospital Experience training is conducted by both St. John and Red Cross. In addition, lectures are presented to the University of Manitoba, Faculties of Medicine, Dentistry, Pharmacy and all schools of Nursing, plus The Emergency Measures Organization indoctrination courses held in the Province.

	<u>Classes</u>	<u>Students</u>
First Aid	25	563
Home Nursing	64	1193
Hospital Experience	2	20
University of Manitoba	3 (6 lectures each)	
Schools of Nursing	5	
Manitoba E.M.O. presentation	4	
Arnprior E.H.S. presentation	2	
Emergency Area presentation	11	
Hospital Exercises	7	
Licensed Practical Nurses	5	
Casualty Simulation	2	50
Fire Chiefs Seminar	1	
School teacher summer seminar	1	
Arnprior candidates	15	36

A series of Public Health lectures were presented in four areas of the province and a two-day Indoctrination course was conducted for pharmacists at Shilo. Training has commenced in Radiation Detection for selected personnel of the Department of Health. A training film on Radioactive decontamination was completed.

First Aid is now in the school curriculum, (Grade 8) and E.H.S. was a member of the curriculum revision committee.

Prepositioning of medical supplies is the third major function, but with the elimination of Federal funds, activity is now confined to selection of Provincial and Federal buildings. Operational planning in the selection of sites, assessment of individual buildings, and identification of personnel is continuing in cooperation with other agencies.

Planning for the distribution of Casualty Collecting Units to the Municipal level is continuing, in an effort to increase the rescue capability of the Municipal government. This entails selection of personnel and storage areas.

Operational

Emergency Health Services this year provided First Aid coverage for the Centennial train (seven sites - 22 days) and Centennial Caravan (54 sites - 81 days) plus required equipment for the Pan Am games.

Equipment was supplied on loan for the

- (1) Grace Hospital move to new quarters
- (2) 4-H Club summer seminar
- (3) Boy Scout camp at Birds Hill

A complete survey of all covered, potable water sources has been completed, documented and distributed to all Municipalities throughout the Emergency Measures Organization, to ensure supplies in the event of radioactive contamination.

Report of Ambulance Officer

The position of Ambulance Officer evolved from one of the recommendations of the Ambulance Service Committee report of 1965.

The objective has been to develop for consideration a plan for the co-ordination of existing ambulance services within the province to ensure:

- 24 hour availability to all residents and transients.
- proper care and handling of cases by all personnel involved.
- proper First Aid and Rescue handling of victims before and during transport.
- control of standards of vehicles, equipment and training.

The program activities have included:

- review of all available reports and recommendations concerning ambulance service.
- study of systems adopted by other jurisdictions in Canada.
- study of systems adopted by other countries.
- compilation of statistics from all agencies.
- feasibility study of communications systems which may be adopted and incorporated in Ambulance Service,
- develop plans for initial and advanced training of ambulance attendants with other agencies.
- study financial implications of an ambulance service.
- review the needs of aspects of Medical transportation within the Province.

A pilot seminar in Ambulance Attendants Training was offered to all personnel connected with Emergency transportation. A total of 187 attended. From this, a series of intensive First Aid courses were presented at five rural points and two Municipalities furnished their own volunteer ambulance services.

The formation of a voluntary ambulance organization does not appear feasible due to the diversification of ambulance services, ranging from the voluntary, to part time business, to fully staffed and highly organized private concerns. However, there has been lessened adverse publicity on ambulance services, siren use, etc., in this past year. Companies have commenced operation for the transport of the handicapped which has bridged the gap between taxis and fully equipped ambulances.

The ambulance organization in the Province of Ontario and the Metropolitan operations in Toronto are being reviewed constantly. Files are being maintained on ambulance matters originating in Canada, the United States and Europe.

Liaison is maintained with the Manitoba Medical Association, the Highway Safety Division and other government agencies.

In addition to the dual function of Emergency Health services Director and Ambulance Officer, additional service has been extended to:

- (1) The revenue branch on matters concerning the Provincial tax and the Pharmaceutical Industry.
- (2) The Department of Industry and Commerce on feasibility studies for manufacturing.

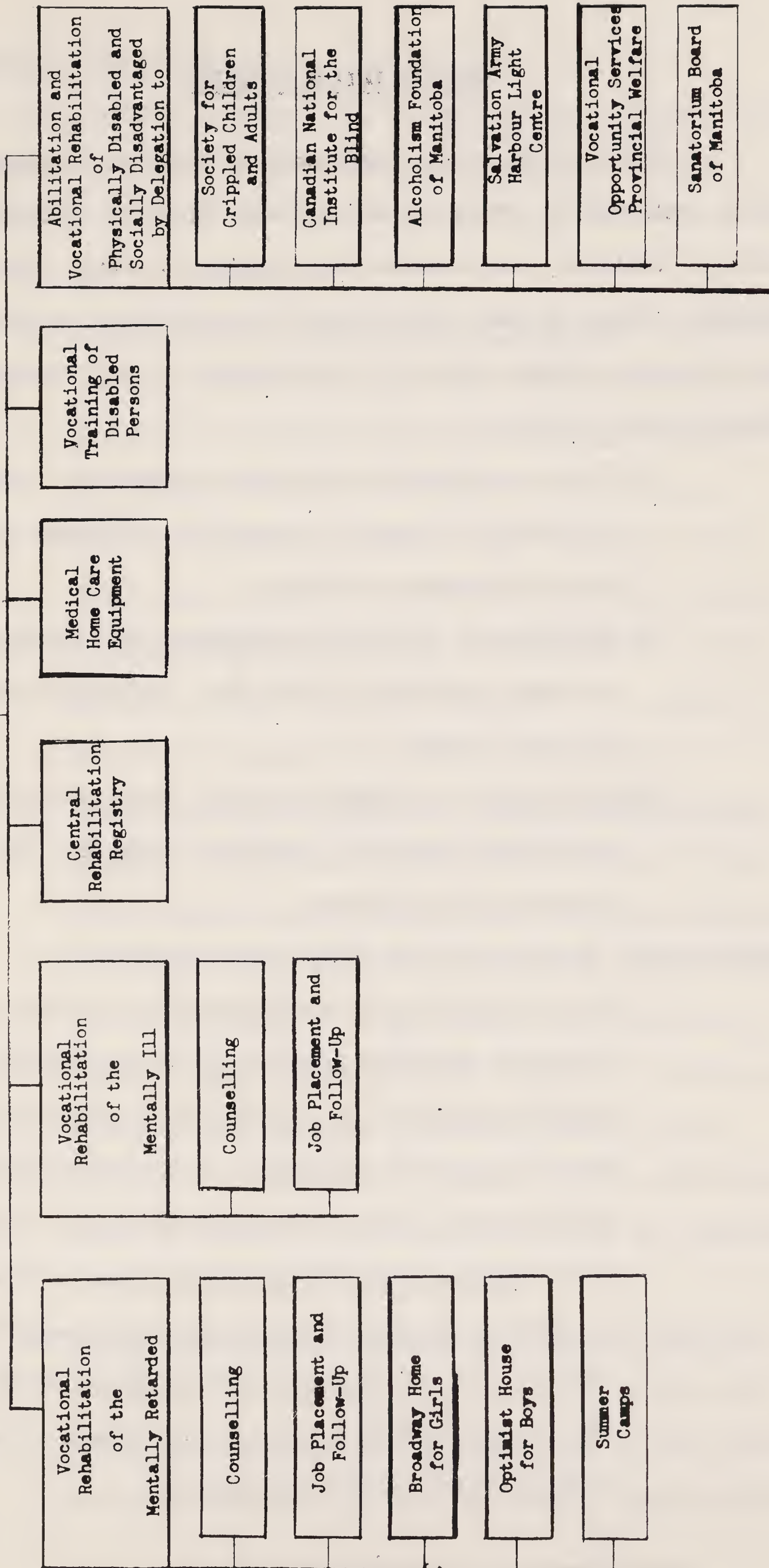
- (3) Director of Preventive Medical Services on identification and sources of Pharmaceuticals for treatment of tropical diseases in the event of their requirement.
- (4) Pharmaceutical consultant to the Department of Welfare on specific problems.

REHABILITATION DIVISION

Minister

Deputy Minister

Rehabilitation Services Division



REHABILITATION DIVISION

This division of the Department of Health is responsible for making available to physically and mentally disabled children and adults of Manitoba, the services they require to attain the fullest physical, mental, social, educational and occupational usefulness of which they are capable within the limitations of their handicaps.

These services include: -

- (a) Medical restoration including any medical, surgical or psychiatric procedure necessary to eliminate or reduce the handicapping condition.
- (b) Provision of prosthetic appliances such as braces, crutches, artificial limbs etc., including training in the use of same.
- (c) Counselling, academic training, vocational testing, pre-vocational education, vocational training, job placement and follow-up.

Rehabilitation Services has two major functions namely: -

1. The co-ordination of government and voluntary agency resources providing services to the physically and mentally disabled and to socially disadvantaged persons. This is generally referred to as "co-ordination at the administrative level." The objective is to develop close working arrangements between these various resources in order to eliminate duplication and ensure the most effective use of existing services and facilities.
2. The provision of an organized comprehensive rehabilitation service to all handicapped persons.

THE PHYSICALLY HANDICAPPED

Four voluntary agencies are responsible for carrying out the "rehabilitation process" on behalf of certain physical disability categories.

The four agencies are: -

- (a) Canadian National Institute for the Blind - responsible for blind persons and those with visual defects who are in danger of becoming blind unless properly treated. This agency is financed through the United Way, a provincial grant with some recovery from the federal grant, and voluntary contributions from rural Manitoba.
- (b) Workmen's Compensation Board - responsible for adults disabled through industrial accidents. The Board's program is financed by premiums from Industry.
- (c) Sanatorium Board of Manitoba - Special Rehabilitation Services - responsible for physically disabled Treaty Indian adults and post-tuberculosis non-Indian persons. The Treaty Indian part of the program is financed entirely by the Government of Canada through the Department of Manpower, with the exception of vocational training costs which are met under the Vocational Rehabilitation Agreement. The program for non-Indian post-tuberculosis cases is financed by the province through the Department of Health, Rehabilitation Services.
- (d) Society for Crippled Children and Adults of Manitoba - responsible for all physically disabled children and adults that do not come within the scope of the aforementioned agencies. This is the largest agency with an

active annual case load of over 3,000. It is financed by a large federal-provincial grant, the annual Easter Seal and March of Dimes campaigns in rural Manitoba, and the United Way in Metropolitan Winnipeg. Their 1967 budget amounts to approximately one million, two hundred thousand dollars of which approximately 55 per cent is provided by the province through Rehabilitation Services and the Department of Education. The Society also provides special services to the other agencies such as psychological assessment and the services of the Industrial Workshop.

With the exception of the Workmen's Compensation Board program, these rehabilitation services are provided directly through a government department in most provinces. In Manitoba the delegation of this responsibility to well established voluntary agencies has proven to be a decided asset. It has permitted greater flexibility in program development and has also involved the participation of many leading community citizens. It should be noted that these four agencies do not by themselves provide all of the services required by the particular group for whom they are responsible.

Many of the required services are available to disabled persons without cost; for example, the in-patient services of active treatment hospitals and out-patient services of certain designated hospitals. The costs are met in a variety of ways. In many instances the disabled person has financial resources (medical insurance etc.) to meet the cost of the services. In other instances the individual may be able to meet part of the cost. In still others he may be a recipient of provincial or municipal welfare and certain costs will be

met by this source. If none of these resources are able to meet the necessary cost of services the rehabilitation agency concerned has funds to cover these costs. In no instance need a physically disabled person in Manitoba go without service because of inability to pay.

THE MENTALLY ILL

The vocational rehabilitation of the mentally ill is a responsibility of the Rehabilitation Services Division. Three full-time vocational rehabilitation counsellors work in close co-operation with the mental hospitals, private psychiatrists and community agencies.

Of major importance to the vocational rehabilitation program for the mentally ill are Skills Unlimited, Winnipeg, and Skills Unlimited, Selkirk. In many instances, it is difficult to obtain a realistic and practical assessment of a person's work potential and work tolerance. In these cases, the two workshops are used to provide under simulated industrial conditions work assessment and work training. A fee is paid to the workshops for this service. The services provided by these two workshops enables the vocational rehabilitation. In cases where the work assessment and work training indicates that the individual is not a suitable candidate for the competitive labour market, Rehabilitation Services places the individual into remunerative sheltered employment in Skills Unlimited, Winnipeg.

During 1967, 250 persons were placed into these two workshops for purposes of work assessment and work training. This experience enabled the rehabilitation counsellors to facilitate the placement of 75 persons into full-time competitive employment, 50 persons were placed into remunerative sheltered employment and another 60 persons

were placed into formal vocational training in preparation for competitive employment. The remaining 65 were found to be incapable of even sheltered employment. About fifty percent of this remaining group are in need of further psychiatric treatment. The other fifty percent are living in the community, attending the Open Door Club operated by the Canadian Mental Health Association or are in need of some type of organized social program.

RE THE MENTALLY RETARDED

The vocational rehabilitation of the mentally retarded is a responsibility of the Rehabilitation Services Division. The primary objective of this service is to assist mentally retarded adults towards a substantially gainful occupation in competitive or sheltered employment in the community. This program accepts referrals from the Manitoba Training School at Portage la Prairie and the community at large. During the past year over 125 referrals were received from the community at large and approximately 80 from the Manitoba Training School. This program also makes extensive use of the services provided by Skills Unlimited, Winnipeg. Each working day, approximately 70 mentally retarded persons attend Skills Unlimited for purposes of work assessment, work training or remunerative sheltered employment.

In order to accomodate a substantial number of mentally retarded adults at the Manitoba Training School who are ready to engage in the program of Skills Unlimited, a bus transports 20 mentally retarded adults from Portage la Prairie to Winnipeg and return, five days per week. This arrangement has reduced the pressure for Winnipeg accommodation and also has permitted more realistic planning for the mentally retarded person before he is discharged from the Manitoba Training School.

Optimist House, a half-way establishment, was opened in the fall of 1967. The official opening culminated over 18 months of co-operative work which has resulted in a very realistic partnership. The Optimist Club of Winnipeg purchased and renovated a large house which accomodates 15 male retardates and a house mother. They also provided all the furnishings for this new half-way house for mentally retarded male adults. The Department of Health provides the required staff and pays for all operating costs including utilities, food, taxes, etc. The Optimist Club of Winnipeg will maintain a continuing interest in this facility and will be involved in recreational programs for the residents. They have also indicated their interest in developing further similar facilities for the mentally retarded.

The Vocational Rehabilitation Program for the Mentally Retarded has enjoyed notable success in placement of mentally retarded persons into employment in the community. The majority of the employment is of a sheltered type whereby the person is employed at less than the minimum wage under a permit provided by Rehabilitation Services and covered by authority from the Minister of Labour. At October 15, 1966, this program had over 150 mentally retarded males and females in employment in the Metropolitan Winnipeg Area. These people are earning anywhere from \$40.00 to \$120.00 per month and are contributing towards their maintenance in accord with their earnings.

As was the case in 1966, the program still has a "waiting list" of employers. Employers have found mentally retarded persons placed with them by this program to be excellent employees and have passed this information on to friends who in turn have applied to the program for an employee. This success is due in no small measure to the great care with which placement is made. Also, in each case,

continuous follow-up is maintained by the rehabilitation counsellor so that if any difficulties arise between an employee and his or her employer, remedial action is immediately taken. It is hoped that with the establishment of hostel accommodation and the addition of rehabilitation counsellors to the program, that more mentally retarded adults will be assisted towards employment in their communities.

For the past year, Rehabilitation Services has had an itinerant counsellor covering the western Manitoba area from Winnipeg. This counsellor is primarily responsible for the vocational rehabilitation of the mentally ill and mentally retarded in Western Manitoba. He works in close co-operation with the Brandon Mental Hospital, the Provincial Welfare Office and the branches of the Association for Retarded Children. He also maintains a close working relationship with the newly opened "Rehab Industries of Western Manitoba" and is responsible for all placements and discharges from this facility. A rehabilitation counsellor will probably be established in Brandon on a full-time permanent basis in the near future. In addition to carrying a counselling function in this area, this person represents the Director of Rehabilitation Services in western Manitoba.

VOCATIONAL REHABILITATION OF ALCOHOLICS

The vocational rehabilitation of alcoholics is handled by two designated agencies, namely, the Alcoholism Foundation of Manitoba and the Salvation Army Harbour Light Centre. The program of the Alcoholism Foundation is financed entirely by the Department of Health. The program of the Salvation Army Harbour Light Centre is also financed in part by a grant from the Department of Health. The programs of both agencies have been considerably expanded in 1967 by the addition of extra counsellors. The Alcoholism Foundation has now

located a counsellor at The Pas and at Brandon. Programs of both agencies are becoming well known and this has resulted in a marked increase in referral of alcoholics seeking help.

HOME CARE

The Director continues to function as a consultant to the Manitoba Hospital Commission on Home Care. At the end of 1967, there were five Hospital Based Home Care Programs operating in Metro Winnipeg including the following hospitals - Winnipeg General, Winnipeg Childrens, Winnipeg Municipal, Deer Lodge and St. Boniface General Hospitals. Also, the St. Boniface General Hospital provides an itinerant Home Care Service to the Misericordia General Hospital. Each hospital has a half-time Medical Director and a full-time Nurse Co-ordinator. In each instance the Nurse Co-ordinator is a member of the Victorian Order of Nurses on loan to the Hospital Home Care Program. There is also a half-time Nurse Co-ordinator serving the Misericordia Hospital who is based at the St. Boniface General. Through these five and one-half Hospital Based Home Care Programs over 425 patients per day are being served. With the exception of the Deer Lodge Hospital Program, the costs of these programs are being financed by the Manitoba Hospital Commission and a small National Health Grant. The Hospital Based Programs have proven very successful in meeting the objective of facilitating the care of patients at home who would otherwise require a hospital bed or circumventing admission to a hospital bed by the provision of required home care services. These Hospital Based Programs maintain a very close working relationship with Provincial and Municipal Welfare Offices and with other government and voluntary agencies.

The Rehabilitation Services Division continues to operate an active and comprehensive Medical Home Care Equipment Service. This service is staffed by two full-time Medical Equipment Technicians. On prescription from a qualified medical practitioner, equipment of a hospital nature is provided to any Manitoba citizen at no cost, in cases where provision of the equipment facilitates discharge of the patient from a hospital or nursing home to his own home, or circumvents admission to these facilities. At December 31, 1967, this service had over 1500 pieces of equipment on loan to over 800 patients throughout the Province of Manitoba. Approximately 500 patients are from Metro Winnipeg and the remaining 300 from rural Manitoba. The dollar value of this equipment is estimated at over \$500,000.00. The type of equipment in the pool includes items such as hospital beds, hydraulic lifts, intermittent positive pressure breathing machines, rocking beds, monoghan chest respirators, mistogen tents and nebulizers, commode chairs, overhead bars, etc. The equipment is loaned to patients for the period prescribed by the attending physician. Some pieces of equipment are turned over as many as ten times per year. There is every indication that the demand for this service will increase as the community and in particular the attending physicians become more aware of the service.

In 1967, through the aforementioned designated voluntary rehabilitation agencies, the two programs in the Rehabilitation Services Division for the Mentally Handicapped, the two vocational rehabilitation programs for Alcoholics and the Vocational Opportunity Services Branch of Provincial Welfare, over 5,000 children and adults have been provided with rehabilitation services. They were assisted in obtaining services ranging from a single counselling session to comprehensive medical

treatment, provision of prosthetic appliances, vocational training, job placement, relocation, etc. An analysis of the 500 persons placed into competitive employment during the year clearly indicates the economic benefits of vocational rehabilitation.

Estimated annual earnings	\$1,500,000.00
Estimated annual payment to income tax	\$ 100,000.00
Cost of services for these 500 rehabilitants	\$ 400,000.00
Estimated annual provincial and municipal welfare savings	\$ 500,000.00

These statistics tell only the most dramatic part of the story. Many hundreds of disabled persons were rehabilitated to sheltered employment in the community, and in sheltered workshops. Many of these gained sufficient remuneration to contribute towards the cost of their maintenance thus reducing at least in part their dependency upon the tax dollar. Also, many disabled persons have been assisted in homebound employment and many have been helped to better look after themselves at home. In addition, many disabled children have been assisted to take advantage of available educational services to equip them for adequate social and economic functioning in their community when they reach adulthood.

